

Научном већу Института за физику у Београду

Београд, 1. 6. 2017.

ПРИМЛ ЕНО: 01		-06- 2017	
Рад.јед.	б р о ј	Арх.шифра	Прилог
0401	725/1		

Предмет: Молба за покретање поступка за избор у звање виши научни сарадник

Молим Научно веће Института за физику у Београду да у складу са Правилником о поступку и начину вредновања и квантитативном исказивању научно-истраживачких резултата истраживача покрене поступак за мој избор у звање виши научни сарадник.

У прилогу достављам:

1. Мишљење руководиоца пројекта са предлогом чланова комисије за избор у звање
2. Стручну биографију
3. Преглед научне активности
4. Елементе за квалитативну оцену научног доприноса
5. Елементе за квантитативну оцену научног доприноса
6. Списак објављених радова и њихове копије
7. Податке о цитираности радова
8. Фотокопију решења о избору у претходно звање
9. Додатке

Са поштовањем,

Марија Митровић Данкулов
др Марија Митровић Данкулов
научни сарадник
Институт за физику у Београду

ИНСТИТУТ ЗА ФИЗИКУ			
ПРИМЉЕНО:		01-06-2017	
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0801	726/1		

Научном већу Института за физику у Београду

Београд, 30. мај 2017. године


Предмет: Мишљење руководиоца пројекта о избору др Марије Митровић Данкулов у звање виши научни сарадник

Др Марија Митровић Данкулов је запослена у Лабораторији за примену рачунара у науци, у оквиру Националног центра изузетних вредности за изучавање комплексних система Института за физику у Београду и ангажована је на пројекту основних истраживања Министарства просвете, науке и технолошког развоја Републике Србије ОН171017, под називом "Моделирање и нумеричке симулације сложених вишечестичних физичких система". На поменутом пројекту ради на темама везаним за проучавање комплексних мрежа и моделирања техносоцијалних система. С обзиром да испуњава све предвиђене услове у складу са Правилником о поступку, начину вредновања и квантитативном исказивању научноистраживачких резултата истраживача МПНТР, сагласан сам са покретањем поступка за избор др Марије Митровић Данкулов у звање виши научни сарадник.

За састав комисије за избор др Марије Митровић Данкулов у звање виши научни сарадник предлажем:

- (1) др Антун Балаж, научни саветник, Институт за физику у Београду
- (2) др Александар Белић, научни саветник, Институт за физику у Београду
- (3) др Александар Богојевић, научни саветник, Институт за физику у Београду
- (4) проф. др Сунчица Елезовић Хацић, редовни професор Физичког факултета Универзитета у Београду

Руководилац пројекта


др Антун Балаж
научни саветник

2 БИОГРАФСКИ ПОДАЦИ КАНДИДАТКИЊЕ

Марија Митровић Данкулов (девојачко Митровић) је рођена 1981. године у Ћуприји, где је завршила основну школу. Гимназију у Ћуприји је завршила 2000. године након чега је уписала основне студије на Физичком факултету Универзитета у Београду, смер Теоријска и експериментална физика. Дипломирала је 2005. године са просечном оценом 9.78. Дипломски рад под називом *Адсорпција и растезање усмерених случајних кретања* урадила је под руководством проф. др Сунчице Елезовић-Хаџић. Након основних студија, 2005. године уписала је магистарске студије на Физичком факултету Универзитета у Београду, смер Физика кондензованог стања материје. Магистарске студије је завршила са просечном оценом 10.00, и јуна 2010. године одбранила магистарски рад под називом *Налажење отежњених подструктура у неким реалним и компјутерски генерисаним мрежама*. Рад је урађен под руководством проф. др Босилке Тадић. Докторат под називом *Структура и динамика техно-социјалних мрежа* одбранила је у марту 2012. године под руководством проф. др Босилке Тадић. Након завршених докторских студија, у периоду од априла 2012. године до фебруара 2014. године, др Марија Митровић Данкулов је радила као постдокторски истраживач у групи проф. др Санта Фортуната на Аалто Универзитету у Финској.

Од краја 2005. године до марта 2009. године др Митровић Данкулов је била ангажована као истраживач приправник у Лабораторији за примену рачунара у науци Института за физику у Београду на пројекту *Моделирање и симулације сложених физичких система*, чији је руководилац био др Александар Белић. Током овог периода је у оквиру међународне сарадње учествовала у пројектима CX-CMCS (ЕУ Центар изврности за нумеричко моделирање комплексних система), од 2006. до 2009. године, и билатералном српско-словеначком пројекту БИ-РС/08-09-047, током 2008. године. Била је редовни учесник, кроз конференције и кратке научне мисије, COST акција P-10 *Physics of risk*, MP0801 *Physics of Competition and Conflicts*, TD1210 *KnowEscape - Analyzing the dynamics of information and knowledge landscapes*, а тренутно је представник Србије у менаџмент комитету COST акције TU1305 *Social Networks and Travel Behaviour*. Од марта 2009. године до априла 2012. године била је запослена као млади истраживач на Одсеку за теоријску физику Института Јожеф Стефан у Љубљани, Словенија. Током тог периода била је ангажована на европском пројекту FP7 *Cyberemotions - Collective emotions in cyberspace*. У периоду од априла 2012. године до фебруара 2014. године била је запослена на Одсеку за биомедицински инжењеринг и компјутерске науке, Школе за науку Аалто Универзитета у Финској. Од марта 2014. године запослена је у Лабораторији за примену рачунара у науци у оквиру Центра изузетних вредности за изучавање комплексних система Института за физику у Београду. Институту за физику у Београду где ради на националном пројекту *Моделирање и нумеричке симулације сложених вишечестичних система* (ОН 171017) као руководилац потпројекта *Моделирање комплексних нелинеарних динамичких система*. Јула 2015. године др Митровић Данкулов је постављена за заменика рудководиоца Иновационог центра Института за физику у Београду, где активно ради на пословима трансфера технологије и заштите интелектуалне својине. У оквиру Иновационог центра ангажована је на пројекту *Upscaling Teslagram® technology based on variable and complex biological structures for security printing* који је финансиран од стране Иновационог фонда Србије у оквиру *Програма сарадње науке и привреде*.

Главна тема истраживања др Митровић Данкулов је примена метода статистичке физике и теорије комплексних мрежа на изучавање колективне динамике различитих комплексних система, са посебним акцентом на колективне феномене у социјалним системима. Коаутор је 22 научне публикације, од којих су 18 објављене у међународним часописима, и једног поглавља у књизи. Половина њених радова је објављена у изузетним часописима као што су *Nature*, *Nature Communications*, *Scientific Reports*, *Royal Society Interface* и *PLOS One*. Добитник је Годишње награде за научни допринос Института за физику у Београду 2017. године. Има широку научну сарадњу са групама из Словеније, Италије, Индије, Израела и Финске. Ментор је на докторским студијама студенткињи Јелени Смиљанић чија се одбрана докторске тезе очекује до краја 2017. године. Др

Митровић Данкулов је члан програмских комитета већег броја водећих међународних конференција из области комплексних система.

3 ПРЕГЛЕД НАУЧНЕ АКТИВНОСТИ

Др Митровић Данкулов се бави емпиријском анализом и теоријским моделовањем структуре и динамике комплексних системима, са акцентом на социјалне системе. Интерагујући биолошки и хемијски системи, неуронске мреже, социјалне интеракције, интернет и World Wide Web, су само неки од примера комерексних система који се састоје од великог броја међусобно повезаних динамичких јединица. За ове системе је карактеристично колективно комплексно понашање које настаје као последица интеракција између конституентна система и које се не може предвидети само на основу понашања његових појединачних делова. Један од циљева науке комплексних система је да објасни како једноставне интеракције између великог броја компоненти система могу да резултују у организовано и адаптивно понашање. Из тих разлога, развој квантитативних метода за изучавање и опис појавног, само-организованог понашања, је један од најзначајнијих задатака.

Први приступ у изучавању глобалних колективних особина оваквих система је њихово мапирање на мреже, графове, чији чворови представљају динамичке јединице, док линкови репрезентују интеракције између њих. Структурне и динамичке особине ових мрежа су врло блиско повезане са динамиком и функцијом система које представљају. Из ових разлога *теорија комплексних мрежа* је од великог значаја за изучавање комплексних динамичких система. Други приступ је *физика комплексних система* која користи методе статистичке физике за изучавање комплексне динамике. Упркос различитости комплексних система, наука полази од претпоставке да је динамика комплексних система заснована на универзалним принципима који могу бити коришћени за описивање различитих проблема, од физике честица па до економије друштва. Пренос резултата и идеја између дијаметрално супротних области доводи до веома важних нових резултата бољег разумевања динамике и структуре комплексних система и комплексности уопште.

У свом досадашњем истраживачком раду др Митровић Данкулов се бавила развојем квантитативних метода и изучавањем динамике и структуре првенствено техно-социјалних, социјалних и биолошких система, као и развијањем квантитативних метода за изучавање и опис структуре комплексних мрежа. Њен истраживачки рад се може груписати у следеће подцелине:

- структура и динамика колективних емоција у техно-социјалним мрежама,
- квантитативно проучавање знања као колективног феномена,
- структура комплексних мрежа,
- структура и динамика социјалних група са дискретном динамиком,
- универзални обрасци и предикција колективног понашања у социјалним системима,
- примена теорије комплексних мрежа билошке системе и изучавање динамике саобраћаја.

У наредним секцијама су приказати главни научни резултати добијени у оквиру ових тема.

3.1 Структура и динамика колективних емоција у техно-социјалним мрежама

Као докторанд, др Марија Митровић Данкулов се у оквиру ове теме бавила проучавањем емотивних колективних стања у техно-социјалним мрежама. Њен кључни допринос у овој области је развој квантитативних метода, базираних на методама и алаткама теорије комплексних мрежа и статистичке физике, за изучавање техно-социјалних система чија су динамика и структура обликоване емоцијама. Мапирањем података из оваквих система на бипартитне мреже и анализом њихове структуре и структуре њихових пројекција показала је да се колективна емотивна стања манифестују кроз формирање заједница, група јако повезаних чланова. Анализа динамике појединачних група указала је на различите механизме који доводе до њиховог формирања: емоције имају главну улогу у формирању заједница када су у питању јако популарне теме, док динамику на непопуларним

темама условљавају појединачна интересовања чланова система. Показала је и да поларитет емоција које преовлађују у систему зависи од његовог типа: у социјалним системима, као што су *MySpace* и *IRC* канали, позитивне емоције имају важну улогу у динамици система, док у системима сличним *BBC Блогу* и *Digg* веб сајту негативне емоције су условљавају настанак и опстанак заједнице. Квантитативном анализом временских серија из различитих техно-социјалних система показала је да је динамика овакви системи карактерисани лавинама, чија дистрибуција величина прати степени закон, и дуго-дометним временским корелацијама. Ово указују на то да се овакви системи налазе у само-организованом критичном стању. Да би детаљније испитала настанак емотивних колективних стања, као и њихову зависност од структуре мреже и осталих параметара у систему (на пример параметар дисеминације емоција), развила је два теоријска модела колективне динамике: модел ћелијских аутомата на фиксираној мрежи и модел емотивних агената на мрежи која еволуира. Модел ћелијских аутомата је омогућио да се испита настанак само-организованог критичног стања у емотивним техно-социјалним заједницама, као и његова зависност од параметра дисеминације емоција. Еволуција комплексне мреже, настанак емотивних заједница, као и емотивна колективна динамика, испитане симулирањем модела емотивних агената. Ови резултати су представљени у следећим радовима:

- How the online social networks are used: dialogues-based structure of MySpace
M. Šuvakov, **M. Mitrović**, V. Gligorijević, and B. Tadić
J. R. Soc. Interface **10**, 20120819 (2013),
- Co-Evolutionary Mechanisms of Emotional Bursts in Online Social Dynamics and Networks
B. Tadić, V. Gligorijević, **M. Mitrović**, and M. Šuvakov
Entropy **15**, 5084 (2013),
- Statistical Analysis of Emotions and Opinions at Digg Website
P. Pohorecki, J. Sienkiewicz, **M. Mitrović**, G. Paltoglou, and J. A. Holyst
Acta Phys. Pol. A **123**, 604 (2013),
- Dynamics of bloggers' communities: Bipartite networks from empirical data and agent-based modeling
M. Mitrović and B. Tadić
Physica A **391**, 5264 (2012),
- Emergence and structure of cybercommunities
M. Mitrović and B. Tadić
In Springer Handbook of Optimization in Complex Networks Theory and Applications, part 2: "Structure and Dynamics of Complex Networks" Ed. M. M. Thai and P. Pardalos, **57**, Part 2, 209, Springer, Berlin (2012),
- Quantitative analysis of bloggers' collective behavior powered by emotions
M. Mitrović, G. Paltoglou, and B. Tadić
J. Stat. Mech.-Theory Exp. P02005 (2011),
- Networks and emotion-driven user communities at popular Blogs
M. Mitrović, G. Paltoglou, and B. Tadić
Eur. Phys. J. B **77**, 597 (2010),
- Bloggers behavior and emergent communities in Blog space
M. Mitrović and B. Tadić
Eur. Phys. J. B **73**, 293 (2010),
- Mixing patterns and communities on bipartite graphs on web-based social interactions
J. Grujić, **M. Mitrović** and B. Tadić

3.2 Квантитативно проучавање знања као колективног феномена

Квантитативне методе развијене за изучавање колективних емотивних стања су примењене на изучавање настанка колективног знања у техно-социјалном систему *StackExchange* сајта Математика. У овим системима се социјалне интеракције остварују кроз постављање питања, давање одговора и коментарисање. Знање је у овим питањима кодирано таговима карактеристичним за мапирање знања у математици што омогућава да се на квантитативан начин изучава динамика настанка колективног знања, као и њена зависност од структуре социјалне мреже. Применом метода теорије комплексних мрежа показано је да је и динамика настанка колективног знања карактерисана формирањем заједница у мрежи. Теоријски модел агената, који је за ову прилику развијен, је показао да структура мреже, заједница, као и њихов број зависе од броја и расподеле експертиза у систему. Анализом временских серија је показано да се системи, у којима знање настаје као последица колективног напора, налазе у стању само-организоване критичности, односно да настанак новог знања дешава у таласима чију је величину и трајање немогуће предвидети. Анализом динамике настанка нових тагова и њихових комбинација, као и анализом структуре мреже коју тагови чине, показано је да је иновативност пре свега вођена новим комбинацијама старих знања, и то додавањем нових тагова на већ постојеће тријаде.

Осим у техно-социјалним заједницама, започето је и испитивање настанка знања у науци. Конкретно, испитана је временска зависност дужине чекања на Нобелову награду од времена додељивања награде. Показано је да научници све дуже чекају да буду награђени за њихова значајна открића, као и да ово време расте експоненцијално са временом. Ово се објашњава чињеницом да су знања све комплекснија и да захтевају већи број и већу разноврсност експертиза. Истраживања су објављена у:

- Topology of Innovation Spaces in the Knowledge Networks Emerging through Questions-And-Answers
M. Andjelković, B. Tadić, **M. Mitrović Dankulov**, M. Rajković, and R. Melnik
PLoS ONE **11**, e0154655 (2016).
- The Dynamics of Meaningful Social Interactions and the Emergence of Collective Knowledge
M. Mitrović Dankulov, R. Melnik, and B. Tadić
Sci. Rep. **5**, 12197 (2015),
- Growing Time Lag Threatens Nobels
S. Fortunato, A. Chatterjee, **M. Mitrović**, R. Ku. Pan, P. Della Briotta Parolo, and F. Becattini
Nature **508**,186 (2014).

3.3 Структура комплексних мрежа

Структура комплексне мреже уско је повезана са и зависи од динамике комплексног система репрезентованог том мрежом. Из тих разлога, развој мера, метода и алгоритама за квантитативно описивање структуре комплексних мрежа је од важности у изучавању динамике комплексних система. Као докторанд, др Митровић Данкулов се бавила развојем метода и алгоритама за налажење заједница, мезоскопских структура, у бинарним и отежињеним комплексним мрежама. Прво је развила метод који користи методе мешовитих модела и експектационо-максимизационог алгорита за налажење отежињених подструктура у усмереним и неусмереним мрежама. Метод базиран на максимизацији генерализоване веродостојности је тестиран на генерисаним отежињеним мрежама и за налажење подструктура у мрежи генских експресија квасца.

Испитала је зависност тополошких особина комексне мреже, са једне стране, и спектралних особина матрице повезаности и нормализованог Лапласијана, са друге. Затим је на основу ових резултата развила метод за налажење мезоскопских структура у отежињеним и бинарним мрежама. Ефикасност и тачност метода је тестиран на мрежама добијеним из модела *scale-free* мрежа са контролисаним бројем заједница и повезаношћу између и унутар њих. Овај метод је затим више пута искоришћен за налажење заједница у различитим техно-социјалним мрежама.

Коришћењем метода *dk*-серије, заједно са колегама, успела је да на конзистентан начин квантификује степен случајности у комплексним мрежама. Показала је да је већину локалних, мезоскопских и глобалних тополошких карактеристика реалних комплексних мрежа могуће репродуковати *dk*-случајним графовима који имају исту средњу повезаност, степену расподелу, степен-степен корелације, средњу вредност и зависност коефицијент груписања од степена чвора као реална мрежа. Ови резултати указују на то да је број значајних и независних тополошких особина у мрежи релативно мали, и да је разумевање њиховог настанка довољно да се разуме еволуција мреже. Најважнији радови у овој подобласти су

- Quantifying Randomness in Real Networks
C. Orsini, **M. Mitrović Dankulov**, P. Colomer-de-Simón, A. Jamakovic, P. Mahadevan, A. Vahdat, K. E. Bassler, Z. Toroczkai, M. Boguńá, G. Caldarelli, S. Fortunato, and D. Krioukov
Nat. Commun. **6**, 8627 (2015),
- Spectral and dynamical properties in classes of sparse networks with mesoscopic inhomogeneities
M. Mitrović and B. Tadić
Phys. Rev. E **80**, 026123 (2009),
- Search of weighted subgraphs on complex networks with maximum likelihood methods
M. Mitrović and **B. Tadić**
LNCS **5102**, 551 (2008).

3.4 Структура и динамика социјалних група са дискретном динамиком

Под социјалним групама са дискретном динамиком подразумевају се оне социјалне заједнице чија се активност, као и већи део социјалних интеракција, дешава у тачно одређеним тренуцима и на тачно одређеним местима, тј. догађајима. За ове групе је карактеристично да се њихови чланови окупљају и социјализују са тачно одређеним циљем, на пример промоција и дисеминација научних резултата, одлазак у бар или на пешачење. Кандидаткиња је заједно са својим сарадницима квантификовала и описала обрасце учешћа појединачних чланова у заједницама научника који учествују на серијама конференција, као и у Meetup групама где се људи окупљају да би квалитетно провели слободно време и уживали у одређеној групној активности. Показано је да је активност појединачних чланова врло хетерогена, као и да обрасци учешћа имају врло универзалан карактер; не зависе од величине групе, локације и динамике одржавања догађаја, као ни од тога да ли су разлози окупљања професионални или лични. Хетерогеност и универзалност образаца указује на то да је осећај припадности појединачних чланова заједници искључиво условљена социјалним ефектима. Коришћењем Пољиног модела урни, показано је да вероватноћа да члан учествује на следећем догађају нелинеарно зависи од односа броја предходних учествовања и не учествовања. Анализа социјалних мрежа је открила да кроз учествовања чланови јачају своје постојеће социјалне везе. Ови резултати су објављени у следећим радовима:

- Associative nature of event participation dynamics: A network theory approach
J. Smiljanić and **M. Mitrović Dankulov**
PLoS ONE **12**, e0171565 (2017),
- A Theoretical Model for the Associative Nature of Conference Participation
J. Smiljanić, A. Chatterjee, T. Kauppinen, and **M. Mitrović Dankulov**

3.5 Универзални обрасци колективног понашања у социјалним системима

У статистичкој физици под универзалношћу се подразумева опажање да широка класа система испољава исто понашање или има исте особине које су независне од микро детаља везаних за конкретан систем. Емпиријска анализа великог броја социјалних система показала је да се они када је у питању испољавање универзалности не разликују много од других комплексних система који се традиционално изучавају у статистичкој физици. Кандидаткиња је, заједно са колегама, анализирала изборне резултате на парламентарним изборима за петнаест земаља и за период од преко три деценије, и показала да успешност кандидата једне странке на парламентарним изборима, мерена у односу на просечан успех његове странке, има универзалну дистрибуцију у земљама које имају иста изборна правила, односно да не зависи од културе, историје или времена догађаја.

Анализирајући податке о обрасцима комуникације и мобилности грађана Обале Слоноваче, показала је да се мобилност унутар и између насељених места може предвидети на основу броја позива између њих и њихове удаљености. Предложени предиктивни модел има исте вредности параметара, независно од просторне скале, за разлику од модела претходно коришћених за предикцију мобилности. Описана истраживања су објављена у следећим радовима:

- **Inferring Human Mobility Using Communication Patterns**
V. Palchykov, **M. Mitrović**, H. Jo, J. Saramaki, and R. Ku. *Pan Sci. Rep.* **4**, 6174 (2014),
- **Universality in voting behavior: an empirical analysis**
A. Chatterjee, **M. Mitrović**, and S. Fortunato
Sci. Rep. **3**, 1049 (2013).

3.6 Примена теорије комплексних мрежа на биолошке системе и у изучавању динамике саобраћаја

У радовима који спадају у ову подобласт показано је како се теорија комплексних мрежа, мапирање и анализа тополошких особина, може применити на изучавање генских експресија пивског квасца, веза између појединачних молекула и молекулских комплекса, и динамике саобраћаја на модуларним мрежама и реалној мрежи улица у кинеском граду Нанџинг. Генске експресије се могу искористити за налажење образаца повезаности између гена израчунавањем и филтрирањем, на одговарајући начин, матрице повезаности, и представљањем ове матрице као отежињене мреже. Спектрална анализа Лапласијана који одговара овој мрежи открива њену нехомогену мезоскопску структуру, модуле. Сваки модул који садржи гене различите функционалне категорије али са истом физичком позицијом у ћелији, једру, цитоплазма или митохондрије.

Друга примена теорије комплексних мрежа у биологији показује да метод комплексних мрежа може бити искоришћен као алатка за ефективну селекцију релевантних експерименталних података из мрежа јачине веза између појединачних молекула и молекуларних комплекса коришћењем динамичке спектроскопије силе. Тополошки модули нађене у овим мрежама, идентификовани методом спектралне анализе, су сачињени од појединачних сетова мрежа под истим условима.

Динамика вођених случајних шетњи на генерисаним и реалним модуларним мрежама се показала као погодан динамички процес за моделирање саобраћаја. Показано је да саобраћај на реалној мрежи Нанџинг града може имати три различита режима у зависности од густине саобраћаја: слободан проток, режим са привременим загушењем, и режим загушеног саобраћаја. Идентификовањем

модула на отежињеној динамичкој мрежи саобраћаја показано је да географски одвојени региони имају различите обрасце саобраћаја. Улога модула у формирању различитих режима саобраћаја испитана симулирањем динамике случајних шетњи на генерисаним мрежама са модулима. Показано је да унутрашња структура модула има огроман утицај на формирање образаца саобраћаја на мрежи. Резултати су објављени у следећим радовима:

- Network theory approach for data evaluation in the dynamic force spectroscopy of biomolecular interactions
J. Živković, **M. Mitrović**, L. Janssen, H. A. Heus, B. Tadić, and S. Speller
EPL **89**, 68004 (2010).
- Jamming and correlation patterns in traffic of information on sparse modular networks
B. Tadić and **M. Mitrović**
Eur. Phys. J. B 71, 631 (2009),
- Correlation patterns in gene expressions along the cell cycle of yeast
J. Živković, **M. Mitrović** and B. Tadić
Studies in computational intelligence 207, 23, Springer, (2009),
- Congestion patterns of traffic studied on Njing city dual graph
H.-L. Zeng, Y.-D. Guo, C.-P. Zhu, **M. Mitrović** and B. Tadić
16th International Conference on Digital Signal Processing, July 5-7 2009, Santorini, Greece New York : IEEE (2009).

4 ЕЛЕМЕНТИ ЗА КВАЛТИТАТИВНУ ОЦЕНУ НАУЧНОГ ДОПРИНОСА КАНДИДАТА

4.1 Квалитет научних резултата

4.1.1 Научни ниво и значај резултата, утицај научних радова

Др Марија Митровић Данкулов је у свом досадашњем раду дала кључни допринос у укупно 22 рада, од којих је 18 објављено у међународним часописима са ISI листе, и једном поглављу у књизи. Од тога је 7 у М21а категорији (међународни часописи изузетних вредности), 5 у М21 категорији (врхунски међународни часописи), 5 у М22 категорији и 1 у категорији М23.

У периоду након одлуке Научног већа о предлогу за стицање претходног научног звања, др Марија Митровић Данкулов је објавила 12 радова у часописима са ISI листе. Од тога је 6 у М21а категорији (међународни часописи изузетних вредности), 3 у М21 категорији (врхунски међународни часописи), 2 у М22 категорији и 1 у М23 категорији. Одржала је више предавања на научним скуповима, од којих су два по позиву. Поред тога, кандидаткиња је у претходном периоду била и предавач на једној летњој школи.

Као најзначајнијих пет радова кандидаткиње могу се узети:

1. Associative nature of event participation dynamics: A network theory approach
J. Smiljanić and **M. Mitrović Dankulov**
PLoS ONE **12**, e0171565 (2017), М21, цитиран 0 пута,
2. The Dynamics of Meaningful Social Interactions and the Emergence of Collective Knowledge
M. Mitrović Dankulov, R. Melnik, and B. Tadić
Sci. Rep. **5**, 12197 (2015), М21а, цитиран 6 пута,
3. Quantifying Randomness in Real Networks
C. Orsini, **M. Mitrović Dankulov**, P. Colomer-de-Simón, A. Jamakovic, P. Mahadevan, A. Vahdat, K. E. Bassler, Z. Toroczkai, M. Boguñá, G. Caldarelli, S. Fortunato, and D. Krioukov
Nat. Commun. **6**, 8627 (2015), М21а, цитиран 7 пута,
4. Quantitative analysis of bloggers' collective behavior powered by emotions
M. Mitrović, G. Paltoglou, and B. Tadić
J. Stat. Mech.-Theory Exp. P02005 (2011), М21а, цитиран 18 пута,
5. Spectral and dynamical properties in classes of sparse networks with mesoscopic inhomogeneities
M. Mitrović and B. Tadić
Phys. Rev. E **80**, 026123 (2009), М21, цитиран 38 пута.

У првом раду детаљно су анализирани обрасци учешћа чланова у активностима четири групе Meetup веб сајта, као и еволуција њихових социјалних мрежа. Овај сај служи људима да стварају и воде групе људи који су заинтересовани за неку специфичну активност, на пример одлазак на забаве, књижевне вечери, пешачење, професионално усавршавање. Meetup група њеним члановима служи да онлајн организују догађаје на којима се физички срећу. У том смислу је активност ових група различита односу на чисте онлајн групе јер изискује додатни напор и време. У ранијем раду било је показано да научници имају врло хетерогене обрасце учешћа на серијама конференција. Велики број њих учествује само једном док мали, али ипак не занемарљив, део њих учествује на великом броју активности. Независност ових образаца од величине, типа или локације конференције показује да је динамика учешћа научника на конференцијама вођена механизмима социјалне природе. Анализа образаца учешћа чланова Meetup групе у њеним активностима је показала да је ова динамика универзална, односно да дистрибуције броја учешћа имају универзални облик и не зависе од типа и величине групе, као и временске скале динамике дешавања догађаја. Кроз анализу еволуције

социјалних мрежа чланова додатно су испитани социјални механизми који прате ову динамику. Конкретно показано је да људи током првих пар учешћа шире своју социјалну мрежу, а да су каснија учествовања имају сврху јачања постојећих веза са остатком заједнице. Такође је показано да људи имају тенденцију да прате своју малу подгрупу људи, а не неког члана посебно. Значај овог рада огледа се у чињеници да је ово прва детаљна анализа еволуције социјалне мреже кроз офлајн активности њених чланова. Такође овај рад даје значајан допринос изучавању универзалности колективног понашања људи.

У другом раду су први пут употребљени методи статистичке физике и теорије комплексних мрежа за проучавање феномена колективног настанка знања у социјалним заједницама. Анализом комплексне бипартитне мреже којом се представљају интеракције између делова техно-социјалне мреже истраживана је њихова кластеризација, док спектар снаге временске серије активности корисника показује да су оне карактерисане лавинама, сличним Бракхаузеновом шуму или лавинама у неким физичким системима као што су модели пешчаних лавина. Овај рад је значајан за физику комплексних система, а његови резултати су значајни за примене у социологији и дисциплинама које се баве динамиком настанка знања и динамиком учења у групама. Кандидаткиња је резултате овог рада представила на два предавања по позиву, као и на другим предавањима која је одржала на престижним конференцијама у овој области.

Трећи рад представља значајан допринос у области теорије комплексних мрежа. У овом раду је по први пут одређен минималан скуп тополошких особина које одређују структуру реалне комплексне мреже и по први пут је, на конзистентан начин, квантификовано колико се реалне комплексне мреже разликују од случајних мрежа. Пошто се помоћу комплексних мрежа данас описују различити системи, физички, биолошки, технолошки и социјални, теорија комплексних мрежа постаје све важнија за истраживања у овим областима. Због тога је овај рад од великог значаја и за ове области, као и за примењене области које се на њих наслањају. Ова прва три рада су део научног доприноса за који је кандидаткиња добила награду Института за физику у Београду 2017. године.

Четврти рад припада корпусу радова кандидаткиње који се баве изучавањем динамике и структуре колективних емоција у техно-социјалним заједницама. У овом раду је по први пут анализирана динамика емоција у онлајн заједницама коришћењем метода статистичке физике. Показано је да се емотивна активност може посматрати као временска серија, као и да се особинама ове временске серије могу квантитативно описати колективна емотивна стања. Ове временске серије имају спектар снаге као сличан спектру снаге шума роза обојености, односно карактерисане су дуго-дометним временским корелацијама. Анализа дистрибуције величина лавина за временске серије које одговарају различитим емоцијама открила је да се ови системи налазе у стању самоорганизоване критичности и да негативне емоције имају кључну улогу у динамици система. Модел хелијских аутомата којим се моделирају емотивне интеракције на фиксираној бипартитној мрежи, предложен и анализиран у овом раду, је омогућио да се детаљно испита улога параметра којим се мери дисеминација емоција између различитих постова. Показано је да вредност овог параметра одређује режим динамике у ком ће се налазити овај динамички систем, односно да ли ће бити у подкритичном, критичном или суперкритичном режиму. Резултати овог рада представљени су на једном позивном предавању и на многим конференцијама на којима је кандидаткиња учествовала. Поред тога, овај рад је и један од значајних резултата пројекта *FP7 Cybermotions - collective emotions in cyberspace* финансираног од стране Европске Уније.

У петом раду је изучавана мезоскопска структура комплексних мрежа, као и њена веза са спектралним особинама матрице повезаности и нормализованог Лапласијана. Показано је да су екстремалне својствене вредности, навјегне својствене вредности матрице повезаности и најмање ненулте својствене вредности нормализованог Лапласијана, у директној вези са постојањем модула, заједница, у мрежи. Анализом спектралних густина ових матрица за компјутерски генерисане мреже са контролисаним бројем модула доказано је постојање процепца у спектру, као и да је ширина овог процепца у директној корелацији са бројем модула у мрежи. Показано је да се својствени

вектори који одговарају екстремалним својственим вредностима локализују на модулима. На основу ових сазнања направљен је алгоритам за налажење модуларних структура у неусмереним комплексним мрежама. Овај метод је кандидаткиња интензивно користила у великом броју својих каснијих радова, као и током истраживања у оквиру пројекта *FP7 Cybermotions - collective emotions in cyberspace*.

4.1.2 Позитивна цитираност научних радова кандидата

Према ISI Web of Science бази радови кандидаткиње су цитирани укупно 238 пута, док је број цитата без аутоцитата 186. Према истој бази h-индекс кандидаткиње је 9.

Прилог: подаци о цитираности са интернет странице ISI Web of Science.

4.1.3 Параметри квалитета часописа

Битан елемент за процену квалитета научних резултата је и квалитет часописа у којима су радови објављени, односно њихов импакт фактор – ИФ. У категорији M21a, M21, M22 и M23 кандидаткиња је објавила радове у следећим часописима, где су подвучени они часописи у којима је кандидаткиња објављивала у периоду након одлуке Научног већа о предлогу за стицање претходног научног звања:

- 1 рад у Nature (ИФ = 42.351),
- 1 рад у Nature Communications (ИФ = 11.470),
- 3 рада у Scientific Reports (ИФ = 5.078 за 1 рад и ИФ = 5.578 за 2 рада),
- 1 рад у Journal of Royal Society Interface (ИФ = 4.907),
- 1 рад у Journal of Statistical Mechanics: Theory and Experiment (ИФ = 2.670),
- 3 рада у PLOS One (ИФ = 3.234 за 2 рада и ИФ = 3.057 за 1 рад),
- 1 рад у Physical Review E (ИФ = 2.508),
- 1 рад у Europhysics Letters (ИФ = 2.893),
- 1 рад у Physica A: Statistical Mechanics and Its Applications (ИФ = 1.676),
- 3 рада у European Physical Journal B. (ИФ = 1.568 за 1 рад и ИФ = 1.575 за 2 рада),
- 1 рад у Entropy (ИФ = 1.564),
- 1 рад у Acta Physica Polonica A (ИФ = 0.604).

Укупан фактор утицаја радова кандидаткиње је 101.12, а у периоду након одлуке Научног већа о предлогу за стицање претходног научног звања тај фактор је 88.331. Часописи у којима је кандидаткиња објављивала радове су по свом угледу цењени и водећи у областима којима припадају. Посебно се међу њима истичу: *Nature*, *Nature Communications*, *Scientific Reports*, *Journal of Royal Society Interface*, *PLOS One*, *Journal of Statistical Mechanics*, *Physical Review E*.

4.1.4 Степен самосталности и степен учешћа у реализацији радова у научним центрима у земљи и иностранству

Кандидаткиња је водећи аутор шест радова, други аутор шест публикација и трећи аутор четири публикације и последњи аутор на две публикације.

На радовима који су објављени у периоду након одлуке Научног већа о предлогу за стицање претходног научног звања, кандидаткиња је водећи аутор две публикација, други аутор четири рада

и последњи аутор на два рада. При изради свих ових публикација кандидаткиња је учествовала у конкретној формулацији проблема, сакупљању и чишћењу података, развоју метода и емпиријској анализи података, конструкцији и нумеричким симулацијама теоријских модела, као и у завршном писању. Радови на којима је кандидаткиња последњи аутор урађени су под њеним руководством. На овим радовима је први аутор студенткиња докторанд којој је кандидаткиња ментор на докторским студијама.

Током израде докторске дисертације на Институту Јожеф Стефан у Љубљани, Словенија, кандидаткиња је у сарадњи са проф. др Босиљком Тадић и др Џорџом Палтоглуом радила на развоју квантитативних метода и изучавању структуре и динамике колективних емотивних стања у техносоцијалним заједницама. Током постдокторског истраживања, у сарадњи са проф. др Сантом Фортунатом, радила је на више различитих проблема који се тичу социјалне динамике, укључујући ту и универзалне обрасце понашања у социјалним системима. На развоју квантитативних мера и изучавању структуре комплексних мрежа радила је и током докторских студија, постдокторског истраживања, као и по повратку на Институт за физику у Београду. По повратку на Институт за физику у Београду, кандидаткиња је започела истраживање динамике различитих социјалних група чија су структура и динамика условљене учествовањем чанова групе на догађајима. Све ове теме су врло актуелне, и спадају у интердисциплинарну област истраживања комплексни системи. За успешно изучавање динамике и структуре социјалних, а и других комплексних, система неопходно је познавање статистичке физике, напредних статистичких метода, теорије комплексних мрежа, као и напредних нумеричких метода, које укључују познавање различитих типова микроскопских модела. Поред тога, истраживање динамике социјалних система захтева и знања из других научних области као што су социологија и компјутерске науке. Кандидаткиња је ова знања стекла током докторских студија и постдокторског усавршавања а затим је та знања пренела на Институт за физику у Београду где успоставила нови истраживачки правац.

Кандидаткиња има активну сарадњу са истраживачима у области физике: проф. др Босиљка Тадић, Љубљана, Словенија, проф. др Санто Фортунато, Блумингтон, САД, др Арнаб Чатерџи, Њу Делхи, Индија и проф. др Зоран Левнајић, Ново Место, Словенија. Поред тога сарађује и са истраживачима у другим областима науке: др Томи Каупинен (компјутерске науке), Хелсинки, Финска, проф. др Пнина Плаут (архитектура и урбано планирање) и проф. др Силвана Стефани (економија).

4.1.5 Награде

Кандидаткиња је добитница годишње награде за научни допринос Института за физику у Београду за 2017. годину.

4.2 Ангажованост у формирању научних кадрова

Кандидаткиња је тренутно ментор на изради докторске дисертације Јелене Смиљанић на Електротехничком факултету Универзитета у Београду чија се одбрана очекује до краја ове године. Поред тога, током 2015. године била је ментор на студентској пракси у Лабораторији за примену рачунара у науци студенту Петру Тадићу са Физичког факултета Универзитета у Београду. Резултати ове праксе представљени су на годишњој конференцији студената Физичког факултета.

Прилог: потврда о менторству руководиоца пројекта, извештај о раду истраживача докторанда.

4.3 Нормирање броја коауторских радова, патената и техничких решења

Сви радови кандидаткиње објављени у периоду након одлуке Научног већа о предлогу за стицање претходног научног звања су базирани на комплексним нумеричким симулацијама. Десет радова, укључујући и један рад М23 категорије објављен као рад са конференције, имају пет и мање

коаутора, тако да улазе пуном тежином на број коаутора. Укупан број бодова које носе ових десет публикација је 75.5. Два рада имају више од пет аутора: рад у часопису *Nature* има шест аутора и број нормираних поена који носи је 8.33; рад у часопису *Nature Communications* има дванаест коатора и број нормираних поена које носи је 4.17. Укупан број поена кандидаткиње на основу M20 публикација пре нормирања износи 95.5, а после нормирања је 88. Нормирани поени чине мање од 10% од укупног броја поена.

4.4 Руковођење пројектима, потпројектима и пројектним задацима

Кандидаткиња руководи потпројектом *Моделирање комплексних нелинеарних динамичких система* у оквиру пројекта основних истраживања ОН171017 *Моделирање и нумеричке симулације сложених вишечестичних система* Министарства просвете, науке и технолошког развоја Републике Србије.

др Митровић Данкулов је заменик руководиоца Иновационог центра Института за физику у Београду. Такође је и представник Србије у менаџмент комитету COST Акције TU1305 "Social Networks and Travel Behaviour"

Током докторских студија кандидаткиња је била ангажована на FP7 пројекту *Cyberemotions - collective emotions in cyberspace* финансираном од стране Европске Уније. Тренутно је ангажована на пројектним задацима развоја алгоритама за детектовање и разликовање биолошких структура на пројекту *Upscaling Teslagram® technology based on variable and complex biological structures for security printing* финансираног од стране Иновационог фонда Србије у оквиру *Програма сарадње науке и привреде*.

Прилог: потврда руководиоца пројекта о руковођењу потпројектом, одлука директора Института за физику о именовању заменика руководиоца пројекта, Веб страна COST Акције TU1305 "Social Networks and Travel Behaviour" (<http://www.tu1305.eu/>)

4.5 Активност у научним и научно-стручним друштвима

Кандидаткиња је члан Одсека за физику кондензоване материје и статистичку физику Друштва физичара Србије. Такође је и представник института у Одбору међууниверзитетског програм за истраживање одрживог развоја Универзитета у Београду.

Уредник је "Special Research topic: Culturomics: Interdisciplinary Path Towards Quantitative Study of Human Culture" групе часописа *Frontiers*.

Рецензент је за часописе *Scientific Reports*, *Journal of Statistical Mechanics*, *PLOS One*, *Applied Network Science*, *Computational Social Networks*, *Frontiers in Physics* и *Quality and Quantity*.

Члан је програмских комитета следећих конференција:

- *The 9th International Conference on Social Informatics*, 13.–15. септембар 2017. године, Оксфорд, Велика Британија,
- *Conference on Complex Systems 2017 (CCS'17)*, 17.–22. септембар 2017. године, Канкун, Мексико,
- *The 6th International Conference on Complex Networks and Their Applications*, 29. новембар–1. децембар 2017. године, Лион, Француска.

Била је члан је научних и програмских комитета следећих конференција:

- *The 2nd International Conference on Complexity, Future Information Systems and Risk - COMPLEXIS 2017*, 24.–26. април, Порто, Португал,
- *The 5th Workshop on Complex Networks and their Applications*, 30. новембар–2. децембар 2016. године, Милано, Италија,

- *The 8th International Conference on Information Technologies and Information Society*, 10. новембар 2016. године, Шмајерске Топлице, Словенија,
- *The 2nd Annual International Conference on Computational Social Science (IC2S2 2016)*, 23.–26. јун 2016. године, Еванстон, САД,
- *The 3rd Conference on Sustainable Urban Mobility*, 26.–27. мај 2016. године, Волос, Грчка,
- *The First Annual International Conference on Computational Social Science (IC2S2 2015)*, 8.–11. јун 2015. године, Хелсинки, Финска,
- *The 7th International Conference on Information Technologies and Information Society*, 4.–6. новембар 2015. године, Ново Место, Словенија,
- *The 6th International Conference on Information Technologies and Information Society*, 5.–7. новембар 2014. године, Шмајерске Топлице, Словенија,
- *The 6th Summer Solstice International Conference on Discrete Models of Complex Systems*, SUMMERSOLSTICE 2014, 22.–25. јун, 2014, Ljubljana, Slovenia

Кандидаткиња је била један од организатора скупа *The First Annual KnowEscape Conference – KnowEscape2013* у оквиру COST Акције TD1210 *KnowEscape - Analysing the dynamics of information and knowledge landscapes* који је одржан у периоду од 18. до 20. новембра 2013. године, на Аалто Универзитету, Еспо, Финска.

Прилог: писмо о прихватању посебне теме у оквиру часописа *Frontiers*, писма уредништва рецензенту, позиви за чланство у програмским и научним комитетима, Веб странице конференција, Веб сајт конференције (<http://knowescape.org/knowescape2013/>).

4.6 Утицајност научних резултата

Утицај научних резултата кандидаткиње је наведен у одељку 4.1. овог документа. Пун списак радова и цитата је у прилогу.

4.7 Конкретан допринос кандидата у реализацији радова у научним центрима у земљи и иностранству

Кандидаткиња је значајано допринела сваком раду на коме је учествовала. Од дванаест радова у часописима у периоду након одлуке Научног већа о предлогу за стицање претходног научног звања, један је комплетно урађен на Институту за физику у Београду под руководством кандидаткиње, пет је урађено у сарадњи са колегама из земље и иностранства, а шест су комплетно реализована у иностранству (док је кандидаткиња била на постдокторском усавршавању). Кандидаткиња је у овим радовима имала кључни допринос: на по два рада је први и последњи аутор, а на четири рада је потписана као други аутор. Конкретно, кандидаткиња је током израде ових публикација била покретач истраживања, радила је на сакупљању и чишћењу података, развоју метода за емпиријску анализу података, као и на њиховој емпиријској анализи, развоју одговарајући модела и њиховим нумеричким симулацијама, писању радова и била у комуникацији са уредником часописа при слању рада за објављивање. Радови на којима је кандидаткиња последњи аутор урађени су под њеним руководством.

На Институту за физику у Београду кандидаткиња је зачетник новог правца истраживања у области физике комплексних система, социофизике. Знања и искуства која је стекла на докторским студијама и постдокторском усавршавању, а која се односе на методе и технике за емпиријску анализу и теоријско моделовање колективних феномена у комплексним системима, је успешно пренела млађим сарадницима у својој подгрупи која је део Лабораторије за примену рачунара у науци, Центра изузетних вредности за изучавање комплексних система.

4.8 Уводна предавања на конференцијама и друга предавања

Након претходног избора у звање, кандидаткиња је одржала следећа предавања:

- **M. Mitrović Dankulov**
Quantifying collective behavior in social systems: a statistical physics approach
Winter Workshop on Complex Systems 2017 (WWCS 2017), February 6–10, 2017, Petnica, Serbia, M32,
- **M. Mitrović Dankulov**
How random are complex networks?
Seminar at Department of Theoretical Physics, Jožef Stefan Institute, Ljubljana, Slovenia, 9 December 2016,
- **M. Mitrović Dankulov**
Complex Networks Theory: An Introduction Summer School on Topological and Scaling Analysis of Transport and Social Media Data, June 13–17, 2016, Gavle, Sweden,
- **M. Mitrović Dankulov** and B. Tadić
Quantitative Study and Modeling of Collective Knowledge Building via Questions and Answers
Symposium on Condensed Matter Physics, SFKM2015, September 7–11, 2015, Belgrade, Serbia, M32,
- **M. Mitrović Dankulov** and B. Tadić
The dynamics of collective knowledge building via questions and answers
International Conference on Computational Social Science, June 8–11, 2015, Helsinki, Finland, M34,
- **M. Mitrović Dankulov**
Koliko su slučajne kompleksne mreže
Predavanje u okviru predmeta Seminari savremene fizike, Institut za fiziku u Beogradu, Belgrade, Serbia, 20 March 2015,
- **M. Mitrović** and B. Tadić
Agent-Based Modeling and Social Structure in Bloggers' Dynamics
6th Summer Solstice International Conference on Discrete Models of Complex Systems, SUMMER-SOLSTICE 2014, June 22–25, 2014, Ljubljana, Slovenia, M34,
- **M. Mitrović** and B. Tadić
Quantitative Study of Innovation and Knowledge Building in Questions& Answers System with Math Tags
The Second Annual KnowEscape Conference, KnowEscape2014, November 24–26, 2014, Thessaloniki, Greece, M34,
- **M. Mitrović**
Statistička fizika socijalnih sistema
Predavanje u okviru predmeta Seminari savremene fizike, Fizički fakultet Univerziteta u Beogradu, Belgrade, Serbia, 28. April 2014,
- **M. Mitrović**, A. Chatterjee and S. Fortunato
Universal Patterns of Voting Behavior
The First Annual KnowEscape Conference, KnowEscape2013, Helsinki, Finland, November 18–20, 2013, M34,

- **M. Mitrović** and B. Tadić

Agent-Based Model Of Blogging

European Conference on Complex Systems, Brussels, Belgium, September 3–7, 2012, M34.

Прилог: позивна писма за учешће на конференцијама, Веб сајтови конференција, изводи из књига апстраката.

5 ЕЛЕМЕНТИ ЗА КВАНТИТАТИВНУ ОЦЕНУ НАУЧНОГ ДОПРИНОСА КАНДИДАТА

Остварени резултати у периоду након одлуке Научног већа о предлогу за стицање претходног научног звања:

Категорија	М бодова	Број	Укупно М	Нормирани број
Категорија	по раду	радова	бодова	М бодова
M21a	10	6	60	52.5
M21	8	3	24	24
M22	5	2	10	10
M23	3	1	3	1.5
M32	1.5	2	3	3
M34	0.5	9	4.5	4.5

Поређење са минималним квантитативним условима за избор у звање виши научни сарадник:

Минималан број М бодова		Остварено
Укупно	50	95.5
M10+M20+M31+M32+M33+M41+M42	40	91
M11+M12+M21+M22+M23	30	88

Према ISI Web of knowledge бази укупан број цитата радова кандидаткиње је 228, док је број цитата без аутоцитата 186. Према истој бази h-индекс кандидаткиње је 9.

6 СПИСАК РАДОВА ДР МАРИЈЕ МИТРОВИЋ ДАНКУЛОВ

Поглавље у истакнутој монографији међународног значаја (M13)

Радови објављени пре претходног избора у звање

1. **M. Mitrović** and B. Tadić
Emergence and structure of cybercommunities
Handbook of Optimization in Complex Networks Theory and Applications, part 2: "Structure and Dynamics of Complex Networks" Ed. M. M. Thai and P. Pardalos, **57**, Part 2, 209-227, Springer, Berlin (2012).

Радови у међународним часописима изузетних вредности (M21a)

Радови објављени након претходног избора у звање

1. C. Orsini, **M. Mitrović Dankulov**, P. Colomer-de-Simón, A. Jamakovic, P. Mahadevan, A. Vahdat, K. E. Bassler, Z. Toroczkai, M. Boguñá, G. Caldarelli, S. Fortunato, and D. Krioukov
Quantifying Randomness in Real Networks
Nat. Commun. **6**, 8627 (2015), ИФ = 11.470 за 2014. год.
2. **M. Mitrović Dankulov**, R. Melnik, and B. Tadić
The Dynamics of Meaningful Social Interactions and the Emergence of Collective Knowledge
Sci. Rep. **5**, 12197 (2015), ИФ = 5.578 за 2014. год.
3. S. Fortunato, A. Chatterjee, **M. Mitrović**, R. Ku. Pan, P. Della Briotta Parolo, and F. Becattini
Growing Time Lag Threatens Nobels
Nature **508**,186 (2014), ИФ = 42.351 за 2013. год.
4. V. Palchykov, **M. Mitrović**, H. Jo, J. Saramaki, and R. Ku. Pan
Inferring Human Mobility Using Communication Patterns
Sci. Rep. **4**, 6174 (2014), ИФ = 5.578 за 2014. год.
5. M. Šuvakov, **M. Mitrović**, V. Gligorijević, and B. Tadić
How the online social networks are used: dialogues-based structure of MySpace
J. R. Soc. Interface **10**, 20120819 (2013), ИФ = 4.907 за 2012. год.
6. A. Chatterjee, **M. Mitrović**, and S. Fortunato
Universality in voting behavior: an empirical analysis
Sci. Rep. **3**, 1049 (2013), ИФ = 5.078 за 2013. год.

Радови објављени пре претходног избора у звање

1. **M. Mitrović**, G. Paltoglou, and B. Tadić
Quantitative analysis of bloggers' collective behavior powered by emotions
J. Stat. Mech.-Theory Exp. P02005 (2011), ИФ = 2.670 за 2009. год.

Радови у врхунским међународним часописима (M21)

Радови објављени након претходног избора у звање

1. J. Smiljanić and M. Mitrović Dankulov
Associative nature of event participation dynamics: A network theory approach
PLoS ONE **12**, e0171565 (2017), ИФ = 3.234 за 2014. год.
2. M. Andjelković, B. Tadić, M. Mitrović Dankulov, M. Rajković, and R. Melnik
Topology of Innovation Spaces in the Knowledge Networks Emerging through Questions-And-Answers
PLoS ONE **11**, e0154655 (2016). ИФ = 3.234 за 2014. год.
3. J. Smiljanić, A. Chatterjee, T. Kauppinen, and M. Mitrović Dankulov
A Theoretical Model for the Associative Nature of Conference Participation
PLoS ONE **11**, e0148528 (2016), ИФ = 3.057 за 2015. год.

Радови објављени пре претходног избора у звање

1. J. Živković, M. Mitrović, L. Janssen, H. A. Heus, B. Tadić, and S. Speller
Network theory approach for data evaluation in the dynamic force spectroscopy of biomolecular interactions
EPL **89**, 68004 (2010), ИФ = 2.893 за 2009. год.
2. M. Mitrović and B. Tadić
Spectral and dynamical properties in classes of sparse networks with mesoscopic inhomogeneities
Phys. Rev. E **80**, 026123 (2009), ИФ = 2.508 за 2008. год.

Радови у истакнутим међународним часописима (M22)

Радови објављени након претходног избора у звање

1. B. Tadić, V. Gligoriјеvić, M. Mitrović, and M. Šuvakov
Co-Evolutionary Mechanisms of Emotional Bursts in Online Social Dynamics and Networks
Entropy **15**, 5084 (2013), ИФ = 1.564 за 2013. год.
2. M. Mitrović and B. Tadić
Dynamics of bloggers' communities: Bipartite networks from empirical data and agent-based modeling
Physica A **391**, 5264 (2012), ИФ = 1.676 за 2012. год.

Радови објављени пре претходног избора у звање

1. M. Mitrović, G. Paltoglou, and B. Tadić
Networks and emotion-driven user communities at popular Blogs
Eur. Phys. J. B **77**, 597 (2010), ИФ = 1.575 за 2010. год.
2. M. Mitrović and B. Tadić
Bloggers behavior and emergent communities in Blog space
Eur. Phys. J. B **73**, 293 (2010), ИФ = 1.575 за 2010. год.
3. B. Tadić and M. Mitrović
Jamming and correlation patterns in traffic of information on sparse modular networks
Eur. Phys. J. B **71**, 631 (2009), ИФ = 1.568 за 2008. год.

Радови у међународним часописима (M23)

Радови објављени након претходног избора у звање

1. P. Pohorecki, J. Sienkiewicz, **M. Mitrović**, G. Paltoglou, and J. A. Holyst
Statistical Analysis of Emotions and Opinions at Digg Website
Acta Phys. Pol. A 123, 604 (2013), ИФ = 0.604 за 2013. год.

Предавања по позиву са међународних скупова штампана у изводу (M32)

Радови објављени након претходног избора у звање

1. **M. Mitrović Dankulov**
Quantifying collective behavior in social systems: a statistical physics approach
Winter Workshop on Complex Systems 2017 (WWCS 2017), February 6–10, 2017, Petnica, Serbia,
2. **M. Mitrović Dankulov** and B. Tadić
Quantitative Study and Modeling of Collective Knowledge Building via Questions and Answers
Symposium on Condensed Matter Physics, SFKM2015, September 7–11, 2015, Belgrade, Serbia.

Саопштења са међународних скупова штампана у целини (M33)

Радови објављени пре претходног избора у звање

1. J. Grujić, **M. Mitrović** and B. Tadić
Mixing patterns and communities on bipartite graphs on web-based social interactions
Proceedings of 16th International Conference on Digital Signal Processing, July 5–7 2009, Santorini, Greece, DSP 2009. New York: IEEE, 1-8, (2009),
2. H.-L. Zeng, Y.-D. Guo, C.-P. Zhu, **M. Mitrović** and B. Tadić
Congestion patterns of traffic studied on Njing city dual graph
Proceedings of 16th International Conference on Digital Signal Processing, July 5–7 2009, Santorini, Greece, DSP 2009. New York : IEEE (2009),
3. J. Živković, **M. Mitrović** and B. Tadić
Correlation patterns in gene expressions along the cell cycle of yeast
Proceedings of International Workshop on Complex Networks (CompleNet 2009), May 26–27 2009, Catania, Italy. Studies in computational intelligence 207, 23–34, Springer, (2009),
4. **M. Mitrović** and B. Tadić
Search of weighted subgraphs on complex networks with maximum likelihood methods
International Conference on Computational Science, June 23–25 2008, Krakow, Poland, LNCS 5102, 551–558 (2008).

Саопштења са међународних скупова штампана у изводу (M34)

Радови објављени након претходног избора у звање

1. J. Smiljanić and **M. Mitrović Dankulov**
Conference attendance patterns
Proceedings of 19th Symposium on Condensed Matter Physics, SFKM2015, September 7–11 2015, Belgrade, Serbia,
2. M. Andjelković, B. Tadić, **M. Mitrović**, and M. Rajković
Algebraic Topology Analysis of Networks Emerging from Content-Driven Social Interactions
Proceedings of From Data to Knowledge, the Third Annual Knowscape Conference, October 7–9 2015, Mons, Belgium,
3. **M. Mitrović Dankulov** and B. Tadić
The dynamics of collective knowledge building via questions and answers Proceedings of International Conference on Computational Social Science, June 8–11 2015, Helsinki, Finland,
4. B. Tadić and **M. Mitrović Dankulov Modeling**
The Dynamics of Knowledge Creation in Online Communities
Proceedings of 7th International Conference on Discrete Models of Complex Systems, 2015 Summer Solstice, June 17–19, 2015, Toronto, Canada,
5. **M. Mitrović** and B. Tadić
Quantitative Study of Innovation and Knowledge Building in Questions& Answers System with Math Tags
Proceedings of The Second Annual KnowEscape Conference, KnowEscape2014, November 24–26 2014, Thessaloniki, Greece,
6. B. Tadić and **M. Mitrović**
The Death of Expertise & Problems in Quantifying Collective Knowledge in Online Social
Proceedings of The Second Annual KnowEscape Conference, KnowEscape2014, November 24–26 2014, Thessaloniki, Greece,
7. **M. Mitrović**, A. Chatterjee and S. Fortunato
Universal Patterns of Voting Behavior
Proceedings of The First Annual KnowEscape Conference, KnowEscape2013, November 18–20 2013, Helsinki, Finland,
8. **M. Mitrović**, A. Chatterjee and S. Fortunato
Universality in voting behavior
Proceedings of 5th International Conference on Information Technologies and Information Society ITIS 2013, November 7–9 2013, Dolenjske toplice, Slovenia,
9. **M. Mitrović** and B. Tadić
Agent-Based Model Of Blogging
Proceedings of European Conference on Complex Systems, Brussels, Belgium, September 3–7 2012.

Радови објављени пре претходног избора у звање

1. **M. Mitrović** and B. Tadić
Modeling of emotional agents on Blogs Proceedings of Cyberemotions - collective emotions in cyberspace, September 20–21 2011, Ljubljana, Slovenia,
2. **M. Mitrović**
Network based methodology for analysis of on-line collective behavior
Proceedings of COST action NP0801 Second Annual Meeting: Physics of Competition and Conflicts, May 18–20, 2011, Eindhoven, Netherlands,

3. **M. Mitrović** and B. Tadić
Complexity in the dynamics of Web users: Methodology for quantitative analysis of empirical data and simulations
Proceedings of European Conference on Complex Systems, September 12–16 2011, Vienna, Austria,
4. **M. Mitrović**
Bipartite network analysis reveals the role of emotion in comments on digg stories
Proceedings of Processes on networks: hunting for universality in social, economical and Biological Networks, COST Woskhop, 10–12 March 2010, Vienna, Austria,
5. **M. Mitrović** and B. Tadić
Emotions & user communities in Blogs and Digg
Proceedings of the CyberEmotions Workshop, 21–23 January 2010, Wolverhampton, UK,
6. **M. Mitrović** and B. Tadić
Network structure and emotions on popular posts
Proceedings of COST action NP0801 Second Annual Meeting: Physics of Competition and Conflicts, May 26–28 2010, Sunny Beach, Bulgaria,
7. **M. Mitrović** and B. Tadić
Patterns of user behavior and community structure on blogs
Proceedings of TWCS 2010, Turunc Workshop on Complex, 30 August – 1 September 2010, Turunc, Marmaris Turkey,
8. **M. Mitrović** and B. Tadić
Agent based model for use behaviour on emergent networks
Proceedings of Cyberemotions - collective emotions in cyberspace, September 8–9 2010, Lusanne, Switzerland,
9. **M. Mitrović**, B. Tadić and G. Paltoglou
Collective emotional behavior on blogs : data-driven modeling and theoretical survey
Proceedings of ECCS'10 Lisbon, European Conference on Complex Systems'10, September 13–17, 2010, Lisbon, Portugal
10. **M. Mitrović** and B. Tadić
Spectral analysis of networks reveals communities in complex systems data
Proceedings of COST action NP0801 First Annual Meeting: Physics of Competition and Conflicts and NET 2009: evolution and complexity, May 28–30 2009, Rome, Italy,
11. **M. Mitrović** and B. Tadić
Finding structure in Blogs: bipartite networks analysis
Proceeding of VALUETOOLS '09, the Fourth International ICST Conference on Performance Evaluation Methodologies and Tools (2009), October 20–22 2009, Pisa, Italy,
12. **M. Mitrović**
Modularity of networks from the perspective of spectral analysis
Proceedings of International Workshop and Seminar on Bio-inspired complex networks in Science and Technology, Max Planck Institute for the Physics of Complex Systems in Dresden, Germany, 2008.

Саопштење са скупа националног значаја штампано у целини (M63)

Радови објављени пре претходног избора у звање

1. **M. Mitrović** and A. Belić

Heuristic Algorithm for Determining Local Properties of Scale-free Networks

XVII National Symposium on Condensed Matter Physics, SFKM 2007, 16–20 September 2007, Vršac, Serbia.

Саопштење са скупа националног значаја штампано у изводу (M64)

Радови објављени пре претходног избора у звање

1. **M. Mitrović** and B. Tadić

Network-based methodology for analysis of complex systems: theory & applications

Book of abstract of XVII National Symposium on Condensed Matter Physics, SFKM 2011, April 18-22 2011, Belgrade, Serbia.

Република Србија
МИНИСТАРСТВО ПРОСВЕТЕ,
НАУКЕ И ТЕХНОЛОШКОГ РАЗВОЈА
Комисија за стицање научних звања

Број:06-00-75/931
31.10.2012. године
Београд

ИНСТИТУТ ЗА ФИЗИКУ			
ПРИЈЕМАНО: 18-12-2012			
Рад. д.	Број	Класификација	Рилог
о/о	1630/1		

На основу члана 22. става 2. члана 70. став 5. Закона о научноистраживачкој делатности ("Службени гласник Републике Србије", број 110/05 и 50/06 – исправка и 18/10), члана 2. става 1. и 2. тачке 1 – 4.(прилози) и члана 38. Правилника о поступку и начину вредновања и квантитативном исказивању научноистраживачких резултата истраживача ("Службени гласник Републике Србије", број 38/08) и захтева који је поднео

Инстџиџуџ за физику у Беоџраду

Комисија за стицање научних звања на седници одржаној 31.10.2012. године, донела је

**ОДЛУКУ
О СТИЦАЊУ НАУЧНОГ ЗВАЊА**

Др Марија Миџровић

стиче научно звање
Научни сарадник

у области природно-математичких наука - физика

О Б Р А З Л О Ж Е Њ Е

Инстџиџуџ за физику у Беоџраду

утврдио је предлог број 664/1 од 05.06.2012. године на седници научног већа Института и поднео захтев Комисији за стицање научних звања број 721/1 од 15.06.2012. године за доношење одлуке о испуњености услова за стицање научног звања **Научни сарадник**.

Комисија за стицање научних звања је по предходно прибављеном позитивном мишљењу Матичног научног одбора за физику на седници одржаној 31.10.2012. године разматрала захтев и утврдила да именована испуњава услове из члана 70. став 5. Закона о научноистраживачкој делатности ("Службени гласник Републике Србије", број 110/05 и 50/06 – исправка и 18/10), члана 2. става 1. и 2. тачке 1 – 4.(прилози) и члана 38. Правилника о поступку и начину вредновања и квантитативном исказивању научноистраживачких резултата истраживача ("Службени гласник Републике Србије", број 38/08) за стицање научног звања **Научни сарадник**, па је одлучила као у изреци ове одлуке.

Доношењем ове одлуке именована стиче сва права која јој на основу ње по закону припадају.

Одлуку доставити подносиоцу захтева, именованој и архиви Министарства просвете, науке и технолошког развоја у Београду.

ПРЕДСЕДНИК КОМИСИЈЕ

др Станислава Стошић-Грујичић,
научни саветник

С. Станислава Стошић-Грујичић



МИНИСТАР
Проф. др Жарко Обрадовић



Winter Workshop on Complex Systems 2017

Home Programme Lectures Participants Venue More



From the 6th to the 10th of February 2017 we will be hosted at the **Petnica Science Center** in Serbia. Forty young researchers from all over the world will attend cutting-edge lectures, develop collaborative projects and discuss the latest on complexity science.

Deadline extended - apply until the 25th of November (23:59 CET)!!!

Invited Speakers

Dirk Brockmann
Humboldt University Berlin

Jesus Gomez-Gardeñes
University of Zaragoza

Matteo Marsili
ICTP

Marija Mitrovic Dankulov
Institute of Physics Belgrade

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IMPORTANT DATES:

Call for Applications
20th of October 2016

Deadline for Applications
~~20th of November 2016~~
25th of November 2016

Notifications of Acceptance
~~1st of December 2016~~
5th of December 2016

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Quantifying collective behavior in social systems: a statistical physics approach - Abstract

Social systems consist of large number of interacting units (individuals, groups and organizations) and often exhibit an emergent collective behavior. As such they belong to a broader class of systems commonly referred as complex systems. The abundance of large scale social data led to the emergence of new interdisciplinary field known as "computational social science" which brings together scientists from different traditional fields of science including mathematicians, computer scientists, theoretical physicists, sociologists, economists, etc. One of their main tasks is to identify, quantitatively describe and understand the emergent collective behavior in various social systems. Statistical physics, which has been proved to be versatile in modeling phenomena across different areas of physics, and beyond, seems to be the most desired tool even for the above emerging discipline. In this talk I will present methodology, a combination of tools and methods of statistical mechanics, complex network theory and theoretical modeling, which can be used for quantitative description of collective behavior in online social systems such as collective emotional behavior and collaborative knowledge building.



Matteo Marsili is a Senior Research Scientist and coordinator of the Quantitative Life Sciences sector of the Abdus Salam ICTP, Trieste. He is a world-leading and polyhedric scientist, equally interested in fundamental problems in statistical physics and more applicative directions of research. He is interested in the study of non-equilibrium critical phenomena, disordered systems, and stochastic processes. He works on applications of statistical physics, including modeling socio-economic phenomena and financial markets, game theory, and biological networks. His contributions include also information theory, statistical learning and high-dimensional inference in complex systems.

He will lecture on High Dimensional Inference.

Relevant literature here!



Marija Mitrovic Dankulov

Marija Mitrovic Dankulov is assistant research professor at the Scientific Computing Laboratory and deputy head of Innovation Centre at the Institute of Physics Belgrade, University of Belgrade. She has extensive knowledge and experience in theoretical and computational physics. Her main research interest are statistical physics of complex systems, with the emphasis on physics of socio-economic systems, and theory of complex networks. She completed her PhD in statistical physics at the Faculty of Physics, University of Belgrade in 2012. After her PhD studies, during which she was employed at the Department of Theoretical Physics, Institute Jožef Stefan, Slovenia, she undertook postdoctoral work at Department of Biomedical Engineering and Computational Science, School of Science Aalto University, Finland.

She will lecture on Collective Behavior in Social Systems.

Abstract here!



PDF	2,023
PDF (web view)	1

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Subject Invitation from SFKM 2015
From Leonardo Golubovic <Leonardo.Golubovic@mail.wvu.edu>
To marija.mitrovic@ipb.ac.rs <marija.mitrovic@ipb.ac.rs>
Date 2015-01-16 08:46



Faculty of Physics University of Belgrade
Institute of Physics Belgrade
Institute for Nuclear Sciences "Vinca" Belgrade
Serbian Academy of Sciences and Arts

Dr. Marija Mitrovic
Scientific Computing Laboratory
Institute of Physics Belgrade
Pregrevica 118
11080 Belgrade, Serbia

Dear dr. Mitrovic,

On behalf of the Organizing and Program Committees and my own, it is my privilege and pleasure to offer you to give an invited talk at the **19th Symposium on Condensed Matter Physics - SFKM 2015**, to be held in Belgrade, Serbia, September 7-11, 2015.

We are hoping that you can accept the invitation and are looking forward to your response. More information about the conference can be found posted at <http://www.sfkm.ac.rs>

We would be very grateful if you could send us a tentative title or subject of your talk at your earliest convenience, as this would be very helpful for our planning the conference sessions.

We are looking forward to meeting you in Belgrade in September.

Sincerely yours,

SFKM 2015 Chair
Prof. Leonardo Golubovic
West Virginia University, USA

XIX Symposium on
Condensed Matter Physics
SFKM 2015

Book of Abstracts



Invited Speakers

Marco Aprili, *Université Paris-Sud 11*
Fakher F. Assaad, *University of Würzburg*
Dora Balazs, *Budapest University of Technology and Economics*
Stefano Baroni, *Scuola Internazionale Superiore di Studi Avanzati (SISSA)*
Wolfgang Belzig, *University of Konstanz*
Nataša Bibić, *Vinča Institute of Nuclear Sciences*
Alexandre Bouzidine, *Université de Bordeaux 1*
Emil Božin, *Brookhaven National Laboratory*
Ivan Božović, *Brookhaven National Laboratory*
Christoph Bruder, *University of Basel*
Harald Brune, *Ecole Polytechnique Fédérale de Lausanne*
Hrvoje Buljan, *University of Zagreb*
Emmanuele Cappelluti, *Sapienza Università di Roma*
Milan Damnjanović, *Faculty of Physics Belgrade*
Edib Dobardžić, *Faculty of Physics Belgrade*
Marija Drndić, *University of Pennsylvania*
Gyula Eres, *Oak Ridge National Laboratory*
Leonardo Golubović, *West Virginia University*
Mirjana Grujić-Brojčin, *Institute of Physics Belgrade*
Bjørk Hammer, *Aarhus University*
Igor Herbut, *Simon Fraser University*
Zoran Ikonić, *University of Leeds*
Zoran Ivić, *Vinča Institute of Nuclear Sciences*
Vladimir Juričić, *University of Utrecht*
Jane Kondev, *Brandeis University*
Zorica Konstantinović, *Institute of Physics Belgrade*
Igor M. Kulić, *Institut Charles Sadron*
Nenad Lazarević, *Institute of Physics Belgrade*
Marjana Ležaić, *Forschungszentrum Jülich*
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Darko Tanasković, *Institute of Physics Belgrade*
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Stefan Thurner, *Medical University of Vienna*
Jack Tuszynski, *University of Alberta*
Mihajlo Vanević, *Faculty of Physics Belgrade*
Ivana Vasić, *Institute of Physics Belgrade*
Vladan Vuletić, *Massachusetts Institute of Technology*
Ilija Zeljković, *Boston College*

Quantitative Study and Modeling of Collective Knowledge Building via Questions and Answers

Marija Mitrović Dankulov^a and Bosiljka Tadić^b

^a*Scientific Computing Laboratory, Institute of Physics Belgrade, University of Belgrade, Belgrade, Serbia*

^b*Department of Theoretical Physics, Jozef Stefan Institute, Ljubljana, Slovenia*

Abstract.

Collective knowledge building is a socio-cultural process which takes place through self-organized dynamics of interactions among individuals with limited level of expertise. Question and Answers (Q&A) sites are excellent repositories of collective knowledge and provide a proper environment where the dynamics of collective knowledge building can be studied. On these sites individuals engage in collaborative solving of specific problems by asking, answering and commenting questions. By combining the stochastic model with the empirical analysis of data from Q&A, we show that collective knowledge emerges as a collective phenomena in large network of actors and artefacts. We examine this collective behaviour by measuring the information divergence and advance of knowledge over time and by analysing the characteristic self-organisational patterns. We also examine the structure of connections and formation of communities with the respect to the level of expertise in the system, which we vary within the model. Our results show that the dynamics of collective knowledge building is strongly influenced by the distribution of expertise in the system.



INTERNATIONAL CONFERENCE ON COMPUTATIONAL SOCIAL SCIENCE

June 8- 11, 2015

Finlandia Hall, Helsinki, Finland

IC²S²

Information and Communication Technologies (ICT) have radically transformed society. New channels of communications were opened, and the ways people behave and relate to each other have been quickly changing over the past years.

But ICT also gives us new powerful instruments to investigate them. A chronic deficiency of the social sciences has long been the impossibility to acquire empirical evidence about social behavior involving large groups of individuals, far beyond the limits imposed by research questionnaires or lab experiments.

Nowadays humans leave an enormous amount of digital traces of activities such as communications, discussions, trading, mobility. Emails, mobile phone calls, instant messaging, tweets, Facebook posts, online transactions offer a wealth of data concerning the behavior of millions of individuals. Such data deluge allows scholars to investigate social behavior at an unprecedented level of detail. Moreover, it has also broadened the spectrum of processes susceptible of investigation, with the inclusion of formerly inaccessible mass phenomena, such as migrations, the diffusion of diseases, the consumption or production of goods, information spreading, organized crime.

The new era of Computational Social Science has then begun. IC2S2 2015 is the first global event on computational social science. Topics of interest include:

- Social networks
- Social contagion
- Agent-based modeling
- Communication dynamics
- Information diffusion and other spreading phenomena
- Social influence
- Opinion dynamics
- Wisdom of crowds
- Mobility
- Popularity dynamics
- Smart cities
- Group formation
- Games and economic behavior
- Science of success

Registration and information desk:

Opening hours during the conference:

Monday, June 8: 08.15 – 18.00

Tuesday, June 9: 08.30 – 16.00

Wednesday, June 10: 08.30-17.30

Thursday, June 11: 08.30 – 17.00

Tel: +358 40 778 1770 (Karoliina Sunell, Tavicon Ltd.)

Tel: +358 40 772 7689 (Pia Banerjee-Rikkonen, Tavicon Ltd.)

Email: iccss2015@tavicon.fi

Internet access:

Participants have a free Internet access in Finlandia Hall during the conference. Username: FinlandiaHall, no password.

Name badges:

Participants are asked to wear their conference name badges at all times when at the conference site and during the social program

Lunch and coffee breaks:

Lunch is included in the conference registration fee. Lunch will be served in the restaurant halls, level 2.

Live streaming:

All plenary sessions of the conference will be streamed

live on You Tube, at channel:

<https://t.co/cUxf7LOBX4>

Transport:

Taxi Helsinki: +358 100 0700, +358 100 0600

Public transportation: <http://www.reittiopas.fi/en/>

Poster presentations:

Posters 1 will be on display on Monday, June 8th and Posters 2 on Wednesday, June 10th in the restaurant halls, level 2. The authors are requested to be in the proximity of their posters during the Poster Sessions, at 15.30 – 17.00 on Monday and at 16.00 – 17.30 on Wednesday.

Program Monday, June 8



Opening (08:45-09:00, Hall A)
Plenary (09:00-10:35, Hall A)



CHAIR: Lada Adamic

9:00 Michael Macy: *Opportunities and challenges for computational social science*

9:40 Jure Leskovec: *Structure and dynamics of information propagation*

10:20 Omar Guerrero, Eduardo López and Robert Axtell. *Labor flows and unemployment mediated by networks*



Coffee Break (10:35-11:05)



Plenary (11:05-12:40, Hall A)



CHAIR: Andreas Flache

11:05 Duncan Watts: *An experimental study of collective self-organization in crisis mapping*

11:45 Matthew Jackson: *Multiplexing and the interaction between borrowing, favor exchange, and advicenetworks: how changes in one social network lead to changes in another*

12:25 Telecom Italy (SKIL Lab & Future Center), Fondazione Bruno Kessler (I3 & Mobs), MIT - Media Lab. (Human Dynamics), Telefonica R & D (User and Media Intelligence), Trento-RISE (smart CROWDS). *The Mobile Territorial Lab – A joint research/industrial living lab to investigate individual and social dynamics*



Lunch (12:40-14:00)

Program Monday, June 8

14:00 Parallel Sessions I



I Networks (14:00-15:30, Hall A)



CHAIR: Martin Rosvall

14:00 János Kertész, Balázs Lengyel, Bence Sagvari, János Török and Zhongyuan Ruan. *The full life cycle of an online social network*

14:15 Young- Ho Eom and Hang- Hyun Jo. *Generalized friendship paradox in social networks: why our friends are “better” than we are*

14:30 Marcella Tambuscio, Giancarlo Ruffo, Alessandro Flammini and Filippo Menczer. *Fact-checking effect on viral hoaxes: a model of misinformation spread in social networks*

14:45 Tal Altshuler, Yoram Shifan, Rachel Katoshevski, Nuria Oliver, Alex Pentland, Erez Shmueli and Yaniv Altshuler. *The network dimension of ride sharing*

15:00 Martha Russell, Jukka Huhtamäki, Kaisa Still, Neil Rubens, Jiafeng Yu and Rahul Basole. *Visualizing transformative networks in innovation ecosystems*

15:15 Valerio Ciotti, Vito Latora and Pietro Panzarasa. *Birds of a feather? Revisiting homophily and tie creation in social networks*



II Online Social Media (14:00-15:30, Hall B)



CHAIR: Bruno Lepri

14:00 Venkata Rama Kiran Garimella, Ingmar Weber and Sonya Dal Cin. *From “I love you babe” to “leave me alone” - romantic relationship breakups on Twitter*

14:15 Galena Kostoska, Marcos Baez, Florian Daniel and Fabio Casati. *Virtual, remote participation in museum visits by older adults*

14:30 Riccardo Fusaroli, Marcus Perlman, Alan Mislove, Alexandra Paxton, Teenie Matlock and Rick Dale. *Timescales of massive human entrainment*

14:45 Kazutoshi Sasahara. *Emergence of novel collective phenomena in Twitter*

15:00 Luca Maria Aiello, Rossano Schifanella and Bogdan State.

Program Monday, June 8

Decomposition of social ties with Blau's exchange theory

15:15 Yelena Mejova and Bob Boynton. *Language plurality in Twitter political speech*



III Games and Economic Behavior (14:00-15:30, Room 22-24)



CHAIR: René Algesheimer

14:00 Matthieu Cristelli, Andrea Tacchella and Luciano Pietronero. *Measuring the Intangible growth potential of countries: weather-like forecasting for economics*

14:15 Jeffrey Naecker and Alexander Peysakhovich. *Evaluating models of choice under risk and ambiguity using methods from machine learning*

14:30 Katarzyna Growiec and Jakub Growiec. *The impact of bridging and bonding social capital on individual earnings: evidence for an inverted U*

14:45 Per Engström and Eskil Forsell. *Demand effects of consumers' stated and revealed preferences*

15:00 Alessio E. Biondo, Alessandro Pluchino, Andrea Rapisarda and Dirk Helbing. *Micro and macro benefits of random investments in financial markets*

15:15 Lukas Norbutas and Rense Corten. *Freecycling in the sharing economy: sustainability of generalized exchange in Facebook networks*



IV Opinion Dynamics (14:00-15:30, Room 25-26)



CHAIR: Daniele Vilone

14:00 Michael Mäs and Lukas Bischofberger. *Web personalization and opinion polarization*

14:15 Rion Brattig Correia, Kwan Nok Chan and Luis M. Rocha. *Discourse polarization in the US congress*

14:30 Philippos Louis, Orestis Troumpounis and Nikolaos Tsakas. *On the unidimensionality of opinions: an experiment*

14:45 Hitoshi Yamamoto, Yuki Ogawa, Tetsuro Kobayashi and Takahisa Suzuki. *Effects of social media contacts on perceived distributions of opinions*

15:00 Samuel Martin, Corentin Vande Kerckhove, Pascal Gend, Peter J.

Program Monday, June 8

Rentfrow, Julien M. Hendrickx and Vincent D. Blondel. *Modeling influence and opinion evolution in online collective behavior*

15:15 Alexandru-Ionut Babeanu, Leandros Talman and Diego Garlaschelli. *Structural properties of realistic cultural space distributions*



V Content Analysis (14:00-15:30, Terrace Hall)



CHAIR: Johan Ugander

14:00 Matthew Denny, James Ben-Aaron, Hanna Wallach and Bruce Desmarais. *Content-conditioned hierarchical latent space models for textual communication networks*

14:15 Sergei Koltcov, Olessia Koltsova and Sergey Nikolenko. *Topic modeling stability and granulated LDA*

14:30 Martin Gerlach, Tiago P. Peixoto and Eduardo G. Altmann. *Community detection of words: topic models and scaling laws*

14:45 Bruno Gonçalves and David Sánchez. *Crowdsourcing dialect characterization through Twitter*

15:00 George Gkotsis, Maria Liakata, Carlos Pedrinaci and John Domingue. *Leveraging textual features for best answer prediction in community based question answering*

15:15 Suin Kim, Ingmar Weber, Li Wei and Alice Oh. *Sociolinguistic analysis of Twitter in multilingual societies*



Posters 1 & Coffee Break (15:30-17:00, Restaurant)

17:00 Parallel Sessions II



I Networks (17:00-18:00, Hall A)



CHAIR: Martha Russell

17:00 Alex Stivala, Johan Koskinen, David Rolls, Peng Wang, Garry Robins and Alessandro Lomi. *Modeling large social networks via snowball samples*

Program Monday, June 8

17:15 Ming-Xia Li, Vasyl Palchykov, Zhi-Qiang Jiang, Kimmo Kaski, János Kertész, Salvatore Micciché, Michele Tumminello, Wei-Xing Zhou and Rosario Nunzio Mantegna. *Statistically validated mobile communication networks: Evolution of motifs in European and Chinese data*

17:30 Tomaso Aste, Guido Previde Massara, Wolfram Barfuss, Rodrigo Ma-zorra, Philip C Treleaven and Tiziana Di Matteo. *Making sense from big data: a network information filtering approach*

17:45 Eugenio Valdano, Luca Ferreri, Chiara Poletto and Vittoria Colizza. *Analytical computation of the epidemic threshold on temporal networks*



II Online Social Media (17:00-18:00, Hall B)



CHAIR: Giancarlo Ruffo

17:00 Paul Laufer, Claudia Wagner, Fabian Flöck and Markus Strohmaier. *Mining cross-cultural relations from Wikipedia - A study of 31 European food cultures*

17:15 Venkata Rama Kiran Garimella and Ingmar Weber. *Co-Following on Twitter*

17:30 Rossano Schifanella, Miriam Redi and Luca Maria Aiello. *An image is worth more than a thousand favorites*

17:45 Géraud Le Falher, Aristides Gionis and Michael Mathioudakis. *Where is Beverly Hills in your town? Finding similar neighborhoods across cities through social media activity*



III Games and Economic Behavior (17:00-18:00, Room 22-24)



CHAIR: Ángel Sánchez

17:00 Daniele Vilone, José J. Ramasco, Anxo Sánchez and Maxi San Miguel. *Social imitation vs strategic choice in the networked prisoner's dilemma*

17:15 Toni Perez, Jordi Zamora-Munt and Victor M. Eguiluz. *A Web-based platform for analysing decision making choices from a collective guessing game*

17:30 Griffith Rees and Felix Reed-Tsochas. *Mechanisms of social system*

Program Monday, June 8

decline: why Sysops left Fidonet

17:45 Nicolas Della Penna, Eaman Jahani, Peter Krafft, Alex Pentland and Julian McAuley. *Bubbles and network structure: a study in cryptocurrencies*



IV Spreading Phenomena (17:00-17:45), Room 25-26)



CHAIR: James Gleeson

17:00 Géois Mathieu, Christian Vestergaard, Ciro Cattuto and Alain Barrat. *Reconstructing sampled temporal networks of contacts for the simulation of epidemic spread*

17:15 Claudio Juan Tessone. *Network volatility as a source of collective dynamics*

17:30 Roberto Visintainer, Piero Poletti, Bruno Lepri and Stefano Merler. *The relevance of social contacts in the transmission of seasonal influenza*

17:45 Przemyslaw Grabowicz, Niloy Ganguly and Krishna Gummadi. *Microscopic description of information diffusion*



V Wisdom of Crowds (17:00-18:00, Terrace Hall)



CHAIR: Taha Yasseri

17:00 Johan Ugander, Ryan Drapeau and Carlos Guestrin. *The wisdom of multiple guesses: a simple strategy for eliciting and aggregating uncertainty*

17:15 Yves-Alexandre de Monjoye, Arkadiusz Stopczynski, Erez Shmueli, Alex Pentland and Sune Lehmann. *The strength of the strongest ties in collaborative problem solving*

17:30 Giacomo Livan and Matteo Marsili. *What do leaders know?*

17:45 Sebastian Herrmann, Franz Rothlauf and Joern Grahl. *Social network studies: on the influence of task difficulty on problem solving*



Reception at City Hall (19:00-20:30, Market Square)

Program Tuesday, June 9



Plenary (09:00-10:35, Hall A)



CHAIR: Alex Pentland

9:00 Albert-László Barabási: *Science of success: quantifying outcomes in social systems*

9:40 Nicholas Christakis: *The evolutionary significance of human social networks*

10:20 Petter Holme and Jari Saramäki. *A paradox of importance in network epidemiology*



Coffee Break (10:35-11:05)



Plenary (11:05-12:30, Hall A)



CHAIR: Jure Leskovec

11:05 Sinan Aral: *The dynamics of social influence and reputation online*

11:45 Daniela Iosub, David Laniado, Carlos Castillo, Mayo Fuster Morell and Andreas Kaltenbrunner. *Networked emotions and communication styles in online collaboration*

12:00 Jingwen Zhang, Devon Brackbill, Sijia Yang and Damon Centola. *Engineering behavior change through social media*

12:15 José A. Cuesta, Carlos Gracia-Lázaro, Alfredo Ferrer, Yamir Moreno and Anxo Sánchez. *Reputation drives cooperative behavior and network formation in human groups*



Lunch (12:30-14:00)

Program Tuesday, June 9



Panel (14:00-15:30, Hall A)

1. CHAIR: Barbara Jasny (editor of Science)
2. Patrick Goymer (editor of Nature)
3. Kathryn Coronges (executive director of the Network Science Institute of Northeastern University)
4. Ivica Cubic (officer of the European Commission)
5. Lada Adamic (Facebook)
6. Nicholas Christakis (Yale)
7. Duncan Watts (Microsoft)



Coffee Break (15:30-16:00)



Boat Trip + Social Dinner (18:30-23:00)

Program Wednesday, June 10

 **Plenary (09:00-10:35, Hall A)**



CHAIR: Matthew Jackson

9:00 Alex Pentland: *On collective action*

9:40 Dirk Helbing: *A digital Nervousnet for everyone and the golden age of complexity science*

10:20 Riccardo Fusaroli and Kristian Tylén. *Investigating conversational dynamics: interactive alignment, interpersonal synergy, and collective task performance*



Coffee Break (10:35-11:05)

 **Plenary (11:05-12:30, Hall A)**



CHAIR: Robin Dunbar

11:05 Alessandro Vespignani (EPJ Data Science Lecturer): *Computational epidemiology does more than forecast*

11:45 Seth Frey and Robert L. Goldstone. *Robust nonconvergent flocking behavior in three different games of iterated reasoning*

12:00 Andrea Baronchelli and Damon Centola. *The emergence of social conventions: an experimental study*

12:15 Milena Tsvetkova and Michael Macy. *The contagion of prosocial behavior and the emergence of voluntary contribution communities*



Lunch (12:30-14:00)

14:00 Parallel Sessions I

 **I Networks (14:00-16:00, Hall A)**



CHAIR: János Kertész

14:00 Mark Lutter. *Do Women Suffer from Network Closure? The moder-*

Program Wednesday, June 10

ating effect of social capital on gender inequality in a project-based labor market, 1929-2010

14:15 Georgios Rizos, Symeon Papadopoulos and Yiannis Kompatsiaris.

Learning to classify users in online interaction networks

14:30 Kaj Kolja Kleineberg and Marian Boguña. *Digital ecology: co-existence and domination among interacting networks*

14:45 Abel Camacho Guardian, Radu Tanase, Claudio Juan Tessone and René Algesheimer. *A generalization of exponential random graph models for multiple networks*

15:00 Patrick Park and Michael Macy. *Cultural correlates of network clustering*

15:15 Laetitia Gauvin, André Panisson, Alain Barrat and Ciro Cattuto. *Revealing mesoscale structures to control dynamical processes in socio-technical systems*

15:30 Michele Starnini, Antoine Moinet and Romualdo Pastor-Satorras. *Burstiness and aging in social temporal networks*

15:45 Fariba Karimi, Ludvig Bohlin, Ann Samoilenko, Martin Rosvall and Andrea Lancichinetti. *Local interests in a global world*



II Online Social Media (14:00-16:00, Hall B)



CHAIR: Matteo Magnani

14:00 Olga Kolchyna, Philip C. Treleaven, Thársis T. P. Souza and Tomaso Aste. *In quest of significance: identifying bursts in social-media that predict consumer sales*

14:15 Fabio Celli, Bruno Lepri and Michal Kosinski. *Prediction of personality from Facebook profile pictures*

14:30 Richard Jayadi Oentaryo, Jia-Wei Low, Arinto Murdopo, Philips Kokoh Prasetyo and Ee-Peng Lim. *Characterizing humans and bots in social media*

14:45 Emre Kiciman. *Towards decision support and goal achievement: identifying action-outcome relationships from social media*

15:00 Lu Chen, Ingmar Weber and Adam Okulicz-Kozaryn. *U.S. religious landscape on Twitter*

Program Wednesday, June 10

15:15 Aris Anagnostopoulos, Fabio Petroni and Mara Sorella. *COLITA: Collaborative Interest-driven Targeted Advertising*

15:30 Young-Ho Eom, Pablo Aragón, David Laniado, Andreas Kaltenbrunner, Sebastiano Vigna and Dima L. Shepelyansky. *Assessing inter-cultural influences through ranking biographies*

15:45 José M. Miotto, Holger Kantz and Eduardo Altmann. *Modelling the popularity dynamics of online videos*



III Games and Economic Behavior (14:00-16:00, Room 22-24)



CHAIR: Felix Reed-Tsochas

14:00 Andreas Diekmann, Ben Jann, Wojtek Przepiorka and Stefan Wehrli. *Using 'big data' to investigate reputation formation and feedback giving in anonymous online markets*

14:15 Riccardo Di Clemente, Guido L. Chiarotti, Matthieu Cristelli, Andrea Tacchella and Luciano Pietronero. *Diversification versus specialization in complex ecosystems*

14:30 Adrien Querbes. *Growth, reputation and information diffusion in the profit-based sharing economy*

14:45 Simon Gaechter, Chris Starmer and Fabio Tufano. *Social relations and coordination: the value of 'oneness'*

15:00 Alberto Antonioni, Ángel Sánchez and Marco Tomassini. *Spatial coordination and cooperation among humans: experimental results*

15:15 Marco Alberto Javarone. *Is poker a skill game?*

15:30 Julia Poncela-Casasnovas, Joan T. Matamalas, Sergio Gómez and Alex Arenas. *Strategical incoherence regulates cooperation in social dilemmas on multiplex networks.*

15:45 David Garcia and Frank Schweitzer. *Trading and social signals in the Bitcoin ecosystem.*



IV Spreading Phenomena (14:00-16:00, Room 25-26)



CHAIR: Petter Holme

Program Wednesday, June 10

14:00 James Gleeson, Kevin O'Sullivan, Raquel Banos and Yamir Moreno. *Effects of memory and network structure on memes competing for popularity*

14:15 Chiara Poletto, Marcelo Gomes, Ana Pastore Y Piontti, Luca Rossi, Livio Bioglio, Dennis Chao, Ira Longini, Elizabeth Halloran, Vittoria Colizza and Alessandro Vespignani. *Global reaction to the 2014 West Africa Ebola epidemic: modification of the global air-travel network and its impact on the international epidemic spread*

14:30 Clara Granell, Alex Arenas and Sergio Gómez. *Analysis of endogenous and exogenous effects on competing spreading processes.*

14:45 Se-Wook Oh and Mason Porter. *Complex contagions with lazy adoption*

15:00 Lewis Mitchell and James Bagrow. *Predictability and social information flow*

15:15 Yang Yang, Jie Tang, Cane Wing-Ki Leung, Yizhou Sun, Qicong Chen, Juanzi Li and Qiang Yang. *RAIN: social role-aware information diffusion*

15:30 Soheil Feizi, Ken Duffy, Manolis Kellis and Muriel Medard. *Network infusion to infer information sources in networks*



V Agent Based Models (14:00-16:00, Terrace Hall)



CHAIR: Károly Takács

14:00 Christian Bongiorno, Rosario Nunzio Mantegna and Salvatore Micciché. *An agent based model of air traffic management*

14:15 Milena Tsvetkova, David Sumpter and Lovisa Sumpter. *Experimental evidence for the Schelling segregation model*

14:30 Franziska Appel, Alfons Balmann, Changxing Dong and Jens Rommel. *FarmAgriPolis -- An agent-based model to conduct behavioral experiments with farmers*

14:45 Tobias Schroeder, Jesse Hoey and Kimberly B. Rogers. *Modeling dynamic identities and uncertainty in social interactions: Bayesian affect control theory*

15:00 Frensis Bras, Laia Bécares, James Nazroo and Nick Shryane. *The*

Program Wednesday, June 10

association between ethnic concentration and racism: an agent-based modelling approach

15:15 Gerardo Iñiguez, Márton Karsai, Riivo Kikas, Zhongyuan Ruan, Kimmo Kaski and János Kertész. *Modelling the slow adoption of technology in online societies*

15:30 Giangiacomo Bravo, Flaminio Squazzoni, Lorena Cadavid and Francisco Grimaldo. *Why do we need more than one referee? A game theory inspired agent-based model of peer review*

15:45 Sean Reardon, Rachel Baker, Matt Kasman, Daniel Klasik and Joseph Townsend. *Simulation models of the effects of race- and socioeconomic-based affirmative action policies*



Posters 2 & Coffee Break (16:00-17:30, Restaurant)

17:30 Parallel Sessions II



I Networks (17:30-18:30, Hall A)



CHAIR: Alex Arenas

17:30 Radu Marculescu. *Understanding communities at nanoscale: bacteria networks formation, dynamics, and control for healthcare applications*

17:45 Ulrich Matter and Omar Guerrero. *Uncovering vote trading through networks and computation*

18:00 Martin Rosvall, Renaud Lambiotte, Andrea Lancichinetti, Manlio De Domenico and Alex Arenas. *Higher-order network flows captured by memory and multiplex networks and their effects on community detection*

18:15 Vedran Sekara and Sune Lehmann. *High-resolution dynamics of social behaviour*



II Online Social Media (17:30-18:30, Hall B)



CHAIR: Nitesh Chawla

17:30 Javier Borge-Holthoefer, Walid Magdy, Kareem Darwish and Ingmar

Program Wednesday, June 10

Weber. *Content and network dynamics behind Egyptian political polarization on Twitter*

7:45 Philipp Singer, Florian Geigl, Denis Helic, Andreas Hotho and Markus Strohmaier. *Bayesian comparison of hypotheses about human trails on the Web*

18:00 Arnau Gavaldà, David R. Choffnes, John S. Otto, Mario A. Sánchez, Fabian E. Bustamante, Luis A.N. Amaral, Roger Guimera and Jordi Duch. *Understanding user behaviour in massive decentralized sharing networks*

18:15 Jared Lorince, Kenneth Joseph and Peter Todd. *Do tags really function as retrieval aids?*



III Games and Economic Behavior (17:30-18:30, Room 22-24)



CHAIR: Ravi Vatra

17:30 Fabio Saracco, Riccardo Di Clemente, Andrea Gabrielli and Luciano Pietronero. *From innovation to diversification: a simple competitive model*

17:45 Zhao Yang, Claudio Tessone, Radu Tanase and René Algesheimer. *Fraud behavior on an online shopping platform*

18:00 Jonathan Gray, Jakub Bijak and Seth Bullock. *Decision theoretic agent based modelling: pregnancy and alcohol misuse*

18:15 Nicholas Sabin and Felix Reed-Tsochas. *Structural embeddedness and economic performance in microfinance*



IV Opinion Dynamics (17:30-18:30, Room 25-26)



CHAIR: Michael Mäs

17:30 Marco Alberto Javarone and Serge Galam. *Modeling group polarization in terrorism dynamics*

17:45 Toni Perez, Juan Fernandez-Gracia, José J. Ramasco and Victor M Eguiluz. *Persistence in collective behavior: stronghold dynamics in elections*

Program Wednesday, June 10

18:00 Guillem Mosquera-Doñate and Marian Boguña. *Follow the leader: herding behavior in heterogeneous populations*

18:15 Ali Nahm, Alex Pentland and Peter Krafft. *Measuring the political preferences of the U.S. electorate*



V Influence (17:30-18:30, Terrace Hall)



CHAIR: Seth Frey

17:30 Antonios Proestakis, Eugenia Polizzi di Sorrentino, Ankur Mani, Sandra Caldeira, Helen Brown, Esther van Sluijs and Benedikt Herrmann. *Social based incentives for increasing physical activity: a school based field experiment.*

17:45 Bas Hofstra, Rense Corten and Vincent Buskens. *Learning in social-networks: selecting profitable choices among alternatives of uncertain profitability in various networks*

18:00 Márton Karsai, Gerardo Iñiguez, Kimmo Kaski and János Kertész. *Complex contagion process in spreading of online innovation*

18:15 Matthew Denny. *Inferring latent influence diffusion networks in the United States Senate*



Program Thursday, June 11



Plenary (09:00-10:35, Hall A)



CHAIR: Michael Macy

9:00 Lada Adamic: *From friend to friend to friend: information diffusion on Facebook*

9:40 Andreas Flache: *The complexity of social integration: a chance and a challenge for big data?*

10:20 Peter Burnap and Matthew Williams. *Computational human security analytics using big data*



Coffee Break (10:35-11:05)



Plenary (11:05-12:30, Hall A)



CHAIR: Sinan Aral

11:05 Robin Dunbar: *Does the Internet really allow you to have more-friends?*

11:45 Andrey Bogomolov, Bruno Lepri, Roberto Larcher, Fabrizio Antonelli, Fabio Pianesi and Alex Pentland. *Energy consumption prediction using people dynamics derived from cellular network data*

12:00 Evangelos Pournaras, Matteo Vasirani, Robert Kooij and Karl Aberer. *Socio-technical trade-offs in self-regulating smart grids*

12:15 Joscha Legewie. *Edge detection algorithms, neighborhood boundaries and the consequences for violent crime and inter-ethnic conflict*



Lunch (12:30-14:00)



Science Meets Industry (14:00-15:00, Hall A)



CHAIR: Ingmar Weber

14:00 Supercell: Ville Suur-Uski. *Clans and social interactions in Clash of Clans*

Program Thursday, June 11

14:20 Reaktor: Juuso Parkkinen. *Probabilistic programming for understanding regional trends in apartment prices*

14:30 Comptel: Matti Aksela. *Practical application of machine learning through a cloud based delivery model for the Internet of Things*

14:40 Elisa: Kimmo Pentikäinen. *Finland - the highest mobile data usage in the world*



Break (15:00-15:15)

15:15 Parallel Sessions I



I Networks (15:15-16:15, Hall A)



CHAIR: Jari Saramäki

15:15 Nitesh Chawla, Jie Tang and Yuxiao Dong. *The evolution of social strategies across the lifespan*

15:30 Sergey Melnik, Mason Porter, Peter Mucha and James Gleeson. *Modelling social contagion on heterogeneous networks of networks*

15:45 Polina Rozenshtein, Aris Anagnostopoulos, Aristides Gionis and Tatti Nikolaj. *Event detection in activity networks*

16:00 Luca Marotta, Salvatore Miccichè, Yoshi Fujiwara, Hiroshi Iyetomi, Hideaki Aoyama, Mauro Gallegati and Rosario Mantegna. *Bank-firm credit network in Japan. An analysis of a bipartite network*



II Online Social Media (15:15-16:15, Hall B)



CHAIR: Alex Peysakhovich

15:15 Alessandro Bessi, Michela Del Vicario, Fabiana Zollo, Guido Caldarelli, Antonio Scala and Walter Quattrociocchi. *Misinformation on online social Media*

15:30 Claudia Wagner, Mohsen Jadidi, David Garcia and Markus Strohmaier. *Gender inequalities on Wikipedia*

Program Thursday, June 11

15:45 David Garcia, Ingmar Weber and Venkata Rama Kiran Garimella. *Gender asymmetries in reality and fiction: the bechdel test of social media*

16:00 Aniko Hannak, Drew Margolin and Ingmar Weber. *Political fact checking on Twitter: when do corrections have an effect?*



III Games and Economic Behavior (15:15-16:15, Room 22-24)



CHAIR: Juuso Välimäki

15:15 Duy Vu, Paola Zappa and Alessandro Lomi. *The micro-relational structure of the interbank overnight money market*

15:30 Andrea Gabrielli, Giulio Cimini, Diego Garlaschelli and Tiziano Squartini. *Systemic risk analysis in reconstructed economic and financial networks*

15:45 Jelena Grujic and Henrik Jeldtoft Jensen. *Model of intermittent behaviour based on multistrategy game*

16:00 Gabriel Rosser, Toby Davies and Tao Cheng. *Self-exciting network constrained point process modelling for crime prediction*



IV Mobility (15:15-16:15, Room 25-26)



CHAIR: Dashun Wang

15:15 Anastasios Noulas, Blake Shaw, Renaud Lambiotte and Cecilia Mascolo. *Topological properties and temporal dynamics of place networks in urban environments*

15:30 Sang Hoon Lee, Robyn Ffrancon, Daniel M. Abrams, Beom Jun Kim and Mason A. Porter. *Matchmaker, matchmaker, make me a match: migration of populations via marriages in the past*

15:45 José J. Ramasco, Maxime Lenormand, Bruno Gonçalves and Antonia Tugores. *Measuring global and regional influence of cites using geolocated tweets*

16:00 Andrea Cuttone, Sune Lehmann and Jakob Eg Larsen. *Analyzing human mobility at multiple spatio-temporal scales*

Program Thursday, June 11



Coffee Break (16:15-16:45)

16:45 Parallel Sessions II



I Networks (16:45-18:45, Hall A)



CHAIR: Mark Lutter

16:45 David Hachen, Omar Lizardo, Michael Penta, Brandon Sepulvado and Matthew Chandler. *Social tie formation, development and persistence: insights from the analysis of changes in the social networks of a college student cohort*

17:00 Fragkiskos Malliaros and Michalis Vazirgiannis. *Disengagement social contagion: assessing network vulnerability under node departures*

17:15 Antonia Godoy, Roger Guimera and Marta Sales-Pardo. *Long-term evolution of email communication networks*

17:30 Hyejin Youn, Daniel Kim, José Lobo and Deborah Strumsky. *Understanding technology pathway from U.S. patents*

17:45 Els Heinsalu, Marco Patriarca, Andrzej Pękalski and Janusz Szwabiński. *Cooking recipes as an instance of cultural competition and spreading*

18:00 Matteo Magnani and Luca Rossi. *Local simplification of multiplex networks*

18:15 Marija Mitrovic Dankulov and Bosiljka Tadic. *The dynamics of collective knowledge building via questions and answers*

18:30 Polina Rozenshtein, Nikolaj Tatti and Aristides Gionis. *Discovering dynamic communities in interaction networks*



II Online Social Media (16:45-18:30, Hall B)



CHAIR: Aristides Gionis

16:45 Farshad Kooti, Gabriel Magno and Ingmar Weber. *The social name-letter effect on online social networks*

Program Thursday, June 11

17:00 Maria Giatsoglou, Despoina Chatzakou, Neil Shah, Alex Beutel, Christos Faloutsos and Athena Vakali. *Spotting fake retweeting activity in Twitter*

17:15 Ian Wood, Johan Bollen and Luis Rocha. *Eigenday Twitter analysis*

17:30 Carlos Castillo, Gianmarco De Francisci Morales, Marcelo Mendoza and Nasir Khan. *Automatic analysis of television news: media, people, framing and bias*

17:45 Mariano Beguerisse Diaz, Guillermo Garduno, Sophia N. Yaliraki and Mauricio Barahona. *Beyond metadata: using content to reveal the evolution of narratives in social media*

18:00 Alex Peysakhovich and Sean Taylor. *Forecasting Cultural Trends on Social Media Using the Crowd*

18:15 Cristobal Garcia, Denis Parra and Peter Gloor. *What can Twitter tell us about leadership in networked social movements: predicting the future success of the 2011-13 Chilean student movement's leaders*



III Games and Economic Behavior (16:45-18:30, Room 22-24)



CHAIR: Andrea Rapisarda

16:45 Simone Righi and Károly Takács. *Emotional strategies as catalysts for cooperation in signed networks*

17:00 Niels Buus Lassen, René Madsen, Abid Hussain and Ravi K. Vatrappu. *Predictive analytics with big social data*

17:15 Greg Morrison, Orion Penner, Roberto Catini, Massimo Riccaboni and Fabio Pammolli. *The local structure of worldwide innovation hubs*

17:30 Ioannis Zisis, The Anh Han, Sibilla di Guida, Georg Kirchsteiger and Tom Lenaerts. *Disentangling the evolution of fairness and strategic considerations through a modified dictator game*

17:45 Marco Smolla, Tucker Gilman, Tobias Galla and Susanne Shultz. *Adding resource competition makes social learning models more elegant*

18:00 Seth Frey and Robert W. Sumner. *Scaling of governance styles in designer societies*

Program Thursday, June 11

18:15 Matteo Chinazzi, Stefano Pegoraro and Giorgio Fagiolo. *Defuse the bomb: rewiring interbank networks*



IV Communication (16:45-18:45, Veranda)



CHAIR: Kimmo Kaski

16:45 Guy Zyskind, Bruno Lepri, Alex Pentland and Erez Shmueli. *On the complementary roles of face-to-face and mediated social interactions*

17:00 Mikko Kivela and Mason Porter. *Estimating inter-event time distributions from finite observation periods in communication networks*

17:15 Hang-Hyun Jo, Jari Saramäki, Robin Dunbar and Kimmo Kaski. *Spatial patterns of close relationships across the lifespan*

17:30 Kyriaki Kalimeri, Ailbhe Finnerty and Fabio Pianesi. *Ingredients of great teams: happiness and productivity in organisations*

17:45 Eduardo López, Jari Saramäki, Elizabeth Leicht, Robin Dunbar, Sam Roberts and Felix Reed-Tsochas. *Persistence of social signatures in human communication*

18:00 Yannick Leo, Eric Fleury, Carlos Sarraute and Márton Karsai. *Socio-economic correlations in social communication networks*

18:15 Nitesh Chawla, Jie Tang and Yuxiao Dong. *Inferring social status and rich club effects in enterprise communication networks*

18:30 Talayah Aledavood, Robin Dunbar, Eduardo López, Esteban Moro, Sam Roberts, Felix Reed-Tsochas and Jari Saramäki. *Persistent daily patterns in mobile telephone communication*



V Success (16:45-18:45, Room 25-26)



CHAIR: Santo Fortunato

16:45 Alexander Petersen. *The apostle effect: quantifying the impact of super ties in scientific careers*

Program Thursday, June 11

17:00 Roberta Sinatra, Dashun Wang, Pierre Deville, Chaoming Song and Albert-László Barabási. *Quantifying patterns of scientific excellence*

17:15 Giulio Cimini, Andrea Gabrielli and Francesco Sylos-Labini. *The scientific competitiveness of nations*

17:30 Gergely Palla, Gergely Tibély, Enys Mones, Péter Pollner and Tamás-Vicsek. *Hierarchical networks of scientific journals*

17:45 Floriana Gargiulo and Timoteo Carletti. *The classical origin of modern science*

18:00 Michael Szell, Roberta Sinatra and Albert-László Barabási. *Understanding effort and success in teams*

18:15 Dashun Wang, Chaoming Song and Albert-László Barabási. *Understanding success in science and technology*

18:30 Stefano Balietti, Robert Goldstone and Dirk Helbing. *Competition promotes diversity and innovation, but undermines fair peer review*



Break (18:45-19:00)



Closing Remarks (19:00-19:15, Hall A)

Posters 1

**Posters 1 on Monday afternoon, June 8
(15:30-17:00, Restaurant)**

1. CSC - IT Center for Science (Seija Sirkiä, Alekski Kallio, Heta Koski, Pekka Lehtovuori). *CSC - Public Finnish infrastructure for data science*
2. Aamena Alshamsi, Fabio Pianesi, Bruno Lepri and Iyad Rahwan. *Social Diversity and Dynamic Psychological States*
3. Adrian Bruhin, Lorenz Goette, Simon Haenni and Lingqing Jiang. *Prosocial Motivation Spillovers in Networks with Strong and Weak Ties: A Study in Blood Donation*
4. Adrián Carro, Raul Toral and Maxi San Miguel. *Coupled dynamics of node and link states: A model for language competition*
5. Adriano Galati, Maria Olivares and Stefan Mangold. *Mobile Empowerment with Delay Tolerant Networks for Socio-Economic Development in South Africa*
6. Alexander J. Gross, Dhiraj Murthy and Lav R. Varshney. *Pace of Life in Cities and the Emergence of Town Tweeters*
7. Allison Chaney, Mike Gartrell and Jake Hofman. *A Large-scale Exploration of Group Viewing Patterns*
8. Anamaria Berea, William Rand and Roland Rust. *The Rise and Fall of Fads and Fashion*
9. Andrey Bogomolov, Bruno Lepri, Jacopo Staiano, Nuria Oliver, Fabio Pianesi and Alex Pentland. *Predicting Crime Hotspots Using Aggregated and Anonymized Data on People Dynamics*
10. Biagio Aragona. *Beyond analytics: what's (really) new of big data from the methodological perspective of a social researcher.*
11. Cheryl Abundo, Stephen Lansing, Elsa Guillot, Murray Cox and Sean Downey. *Languages association with maternal genetic lineages persists from the late Pleistocene*
12. Dario Zappalà, Alessandro Pluchino and Andrea Rapisarda. *Selective altruism in collective games*
13. Didem Gundogdu, Ozlem Durmaz Incel, Albert Salah and Bruno Lepri. *Social event detection in aggregated mobile phone data using Markov modulated poisson process*
14. Dion O'Neale. *Clustering of Technical Capabilities within Regions*
15. Eric Malmi, Arno Solin and Aristides Gionis. *Reconstructing and Analyzing Family Trees: Towards Longitudinal Computational Social Science*
16. Fahad Alhasoun and Marta Gonzalez. *Do Socially Connected People Move Similarly?*
17. Giulio Cimini, Tiziano Squartini, Andrea Gabrielli and Diego Garlaschelli.

The dynamics of collective knowledge building via questions and answers

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Collective knowledge building is a socio-cultural process which takes place through self-organized dynamics of interactions among individuals [1]. In recent years, quantitative study of different collective social phenomena has been enabled by vast amount of empirical data in online communication systems such as Blogs [2], Digg [3], online social networks [4, 5, 6], online chats [8] and online games [7, 9]. Question and answers (Q&A) sites form excellent repositories of collective knowledge and provide a proper environment where dynamics of collective knowledge building can be studied. On these sites, interactions among users are conveyed by means of asking and answering or commenting questions. This kind of problem-solving collaborative dynamics gives rise to new social phenomena, for example, formation of cross-topic or cross-disciplinary groups of participants, popularity of particular problems, subjects, authors or their solutions.

We analyse the empirical data from Mathematics Q&A site of StackExchange network. The large dataset used for the analysis contains all user-contributed content on this site for the period of four years. We focus on quantitative analysis of collective phenomena arising in the exchange of cognitive contents that can be identified in the empirical data. We combine diverse methodologies that are illustrated by the results in Fig. 1.

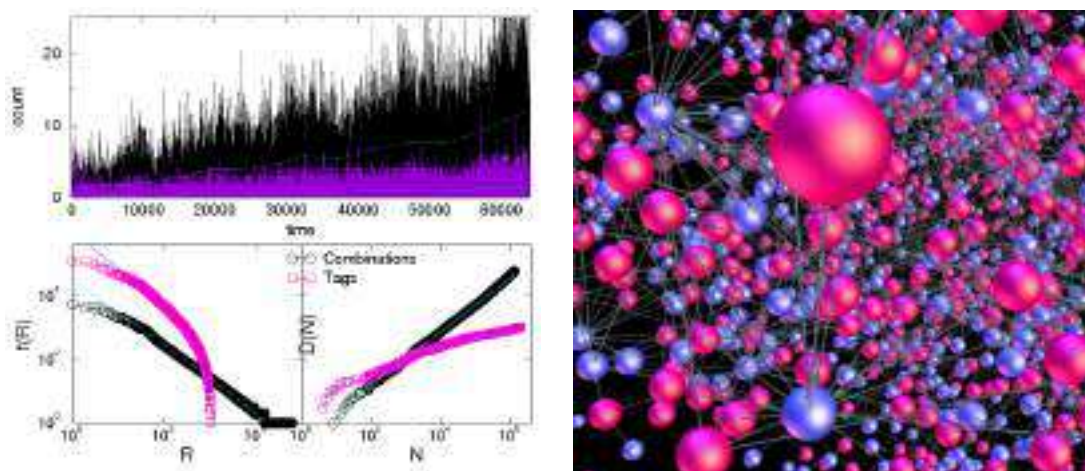


Figure 1: An example of time series with a specified knowledge contents and the number of users, exhibiting an increasing trend (top left); two measures of cooperation and innovation (bottom left) and a part of the network of connection between users and questions (right).

In particular, in our analysis, we map the data onto suitable *bipartite networks* of users and questions; using the appropriate methods of complex networks theory we analyse these bipartite graphs and their projection. Specifically, using the spectral analysis method for community detection [10], we identify user communities and examine dynamics of their formation in relation with tags (categories) of asked questions and answers. We consider *time series* of the number of events (questions, answers, comments) per time unit as well as the series of selected events that contain a particular knowledge or tag. As the Fig. 1 shows, these time series typically exhibit an increasing trend with a characteristic long cycle. Using the proper methods [4], we remove trends in these time series and examine the nature of fluctuations, clustering of events and temporal correlations by detrended time series analysis. Furthermore, we estimate two measures of *innovation and cooperation* that, according to ref. [11], can be described by the appearance of power laws in the related Zipf's and Heap law. In the present data, we demonstrate the occurrence of such functional relationships in the frequencies of each tag but also in tags combinations that develop in the sequence of events.

To further understand the dynamics of knowledge exchange from the microscopic to the global level, we introduced a model of interacting agents and performed simulations for varying parameters. The simulated results confirm the occurrence of collective knowledge as observed in the empirical data.

References

- [1] J.I.M. Carpendale and U. Müller, editors, *Social Interactions and the Development of Knowledge*. Lawrence Erlbaum Associates, Inc. Mahwan, New Jersey, **2013**.
- [2] M. Mitrović, G. Paltoglou, B. Tadić, Networks and emotion-driven user communities at popular blogs, *Eur. Phys. J. B* **2010**, *77*, 597609.
- [3] M. Mitrović, G. Paltoglou, B. Tadić, Quantitative analysis of bloggers collective behavior powered by emotions. *J. Stat. Mech. Theor. Exp.* **2011**, *2011*, P02005.
- [4] M. Šuvakov, M. Mitrović, V. Gligorijević, B. Tadić, How the online social networks are used: Dialogues-based structure of MySpace, *J. R. Soc. Inter.* **2012**, *10*, 20120819.
- [5] P. De Meo, E. Ferrara, G. Fiumara, A. Provetti, On Facebook, most ties are weak *Communications of the ACM* **2014**, *57*, 78-84.
- [6] S. González-Bailón, J. Borge-Holthoefer, A. Rivero, Y. Moreno, The dynamics of protest recruitment through an online network, *Sci. Rep.* **2011**, *1*, 197.
- [7] M. Szell, S. Thurner, Measuring social dynamics in a massive multiplayer online game, *Soc. Networks* **2010**, *32*, 313329.
- [8] V. Gligorijević, M. Skowron, B. Tadić, Structure and stability of online chat networks built on emotion-carrying links, *Physica A* **2013**, *392*, 538543.
- [9] M. Szell, R. Lambiotte, S. Thurner, Multirelational organization of large-scale social networks, *Proc. Natl. Acad. Sci. USA* **2010**, *107*, 1363613641.
- [10] M. Mitrović, B. Tadić, Spectral and dynamical properties in classes of sparse networks with mesoscopic inhomogeneities, *Phys. Rev. E* **2009**, *80*, 026123.
- [11] F. Tria, V. Loreto, V.D.P. Servedio, S.H. Strogatz, The dynamics of correlated novelties, *Sci. Rep.* **2014**, *4*, 5890.



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Conference Overview

Coauthors: Dario Zappalà and Alessandro Pluchino

We study the emergence of altruistic behaviour in collective games. In particular, we take into account Toral's version of collective Parrondo's paradoxical games, in which the redistribution of capital between agents, who can play different strategies, creates a positive trend of increasing capital. In this framework, we insert two categories of players, altruistic and selfish ones, and see how they interact and how their capital evolves. More in detail, we analyse the positive effects of altruistic behaviour, but we also point out how selfish players take advantage of that situation. The general result is that altruistic behaviour is discouraged, because selfish players get richer while altruistic ones get poorer. We also consider a smarter way of being altruistic, based on reputation, called "selective altruism", which prevents selfish players from taking advantage of altruistic ones. In this new situation it is altruism, and not selfishness, to be encouraged and stabilized. Finally, we introduce a mechanism of imitation between players and study how it influences the composition of the population of both altruistic and selfish players as a function of time for different initial conditions and network topologies adopted.

*Modeling The Dynamics of Knowledge Creation in Online Communities***Bosiljka Tadic**

Department of Theoretical Physics, Jozef Stefan Institute, Ljubljana, Slovenia

Coauthors: Marija Mitrovic Dankulov, Scientific Computing Laboratory, Institute of Physics Belgrade, Serbia

Exchange of knowledge contents supported by online communication systems can lead

to the emergent behavior, where interacting communities share an accumulated knowledge. In this process, both the knowledge of individual actors as well as the patterns of their conduct over time play an important role. In Ref. [1], we have analyzed the emergence of collective knowledge in a modern Questions & Answers (Q& A) system Mathematics, where cognitive elements of each artifact are marked by several tags within the standard mathematical classification scheme. Here, we present a microscopic model of knowledge sharing, which correctly accounts for the detailed description of the process from the elementary to the global scale. Based on our experience in modeling online social communications [2, 3, 4], the knowledge-based interactions in this model are closely related to the dynamics observed in the empirical system [1]. Specifically, the interaction rules match the studied Q& A system, and the profiles of the actors in the model are statistically similar to the profiles of users in Mathematics. In addition, we assume that at least minimal matching occurs between the cognitive contents of the answered question and the actor's expertise, which can be expressed by a combination of tags.

Following the sequence of events in the simulations, we observe the growth of a bipartite graph of actors and their artifacts, and the appearance of network communities. The structure of communities reveals the principal actors and the involved cognitive elements. We sample time series related to the integral activity in the network as well as the activity that is strictly involving a particular cognitive element or specified combinations of such elements. By analysis of these time series, we determine various indicators of the collective behavior and the related knowledge contents.

Furthermore, we investigate how these indicators depend on the actors' profiles and the range of their expertise.

This work was supported by the program P1-0044 of the Research Agency of the Republic of Slovenia and the European Community's COST action TD1210 Analyzing the dynamics of information and knowledge landscapes-KNOWeSCAPE.

References

[1] M. Mitrovic Dankulov, R. Melnik, B. Tadic, Dynamics of meaningful social interactions and emergence of collective knowledge, under review.

[2] M. Mitrovic, B. Tadic, Dynamics of bloggers' communities: Bipartite networks from empirical data and agent-based modeling, *Physica A* 391, 5264-5278 (2012).

[3] B. Tadic and M. Šuvakov, Can Human-Like Bots Control Collective Mood: Agent-Based Simulations of Online Chats *J. Stat. Mech. Theory and Experiment*, P10014 (2013).

[4] B. Tadic, Modeling behavior of Web users as agents with reason and sentiment, in "Advances in Computational Modeling Research: Theory, Developments and Applications", edited by A.B. Kora, Novapublishing, N.Y., 2013, ISBN: 978-1-62618-065-9

Speculative Constraints on Oligopoly

Henry Thille

University of Guelph, Department of Economics & Finance, Canada

Coauthors: Sebastien Mitraille

The activity of speculators in markets for storable commodities is viewed with suspicion by many people, however this activity plays a relatively benign role in most economic models that allow for it. Most of the research on the economics of speculation

an agent-based model, we introduce heterogeneity through the model parameters, which are then considered individual attributes and include influence rates, effectiveness of advertising, price sensitivity, and speed of adoption. We also examine the effects of various network topologies by organizing individuals into lattice and preferential attachment networks. From there, we add two extra components to the adoption mechanism by introducing a social influence factor by which an agent can be influenced by the adoption patterns of their neighbourhood, as well as a green factor, which assumes an environmental product or policy being adopted and is the likelihood that an individual will adopt based on environmental reasons alone. We found that advertising had the most effect on the length of time it took for the model to reach its equilibrium. Influence rates and the speed of adoption rate had a small effect on how fast awareness and adoption took place within the first 100 time steps. The price sensitivity was the only parameter to affect the resulting equilibrium point. Finally, we found that various networks had less of an influence than expected on the resulting equilibrium, and overall the results from the agent-based simulations were very close to those obtained through differential equations.

[Back to top](#)

Program

Wednesday: June 17, 2015

8:45-9:15 Registration, Breakfast

*Session Chair of Invited
Talks: **Bosiljka Tadic***

9:15-9:30 Opening Remarks

9:30-10:00 - Paola Flocchini
University of Ottawa, Ottawa, ON,
Canada
*Time-Varying Graphs and Dynamic
Networks*

10:00-10:30 - Babak Farzad
Brock University, St. Catharines,
ON Canada
*Strategic models for network
formation*

10:30-11:00 Break

*Session Chair of Invited
Talks: **Paola Flocchini***

11:00-11:30 - Raul J Mondragon
Queen Mary University of London,
UK
*Network ensembles based on the
Maximal Entropy and the Rich-Club*

11:30-12:00 - Bosiljka Tadic
Dept. of Theoretical Physics, Jozef
Stefan Institute, Ljubljana,
Slovenia
*Modeling The Dynamics of
Knowledge Creation in Online
Communities*

12:00-1:30 Lunch

*Session Chair of
Contributed Talks: **Raul
J Mondragon***

1:30-1:50 - Monica Cojocaru

University of Guelph, Guelph, ON,
Canada

*Modelling awareness and adoption:
aggregate behaviour versus
agent-based interactions with
network effects*

1:50-2:10 - Sergey Melnik

MACSI, Dept. of Math. & Stat.,
University of Limerick, Ireland

*Analytical approach to calculating
shortest path lengths on networks*

2:10-2:30 - Pierre-Andre Noel

University of California, Davis, CA,
USA

*Wide motifs: a new tool for when
cycles matter*

2:30-2:50 - Victor Veitch

Dept. of Statistical Sciences,
University of Toronto, Toronto,
ON, Canada

*A General Framework for Sparse
Random Graphs*

2:50-3:30 Break

*Session Chair of Invited
Talks: **Pietro Lio'***

3:30-4:00 - Stanislaw Drozd

Polish Academy of Sciences and
Cracow University of Technology,
Poland

*Complexity characteristics of world
literature*

**4:00-4:30 - José Fernando
Ferreira Mendes**

University of Aveiro, Portugal
*Structural properties of complex
networks*

4:30-6:00 Reception

Thursday: June 18, 2015

8:45-9:00 Breakfast

Session Chair of Invited

*Talks: **Andrea***

Rapisarda

9:00-9:30 - Dawn Cassandra

Parker

University of Waterloo, School of
Planning and WICI, Waterloo, ON,
Canada

*Integration of agent-based
modeling, network science,
analytical models, and inductive
meta-modelling for applied
analysis of complex systems
phenomena*

9:30-10:00 - Jaroslaw Was

AGH University of Science and
Technology, Cracow, Poland

*Agent-based approach and Cellular
Automata: a promising perspective
in crowd dynamics modeling?*

10:00-10:30 Break

Session Chair of

*Contributed Talks: **Rolf***

Hoffmann

10:30-10:50 - Jakub Porzycki,

Robert Lubas

AGH University of Science and
Technology in Kraków, Poland

*Dynamic data driven simulation as
a basis of crowd management
supporting system*

**10:50-11:10 - Robert Lubas, Jakub
Porzycki**

AGH University of Science and

Technology in Kraków, Poland
*Supporting the facility design
process in terms of optimal
pedestrian flow*

11:10-11:30 - Jalal Arabneydi
McGill University, Montreal, QC,
Canada
Mean-Field Teams

11:30-11:50 - Bruno Di Stefano
Nuptek Systems Ltd., Toronto, ON,
Canada
*Biomimicry Based Decision Of
Computationally Minimal Cognitive
Agents*

11:50-12:10 - Anna T. Lawniczak
University of Guelph, Guelph, ON,
Canada
*Performance Of Simple Cognitive
Agents Using Observational
Learning*

12:10-1:30 Lunch

*Session Chair of Invited
Talks: Franco Bagnoli*

1:30-2:00 - Andreas Deutsch
Centre for Information Services
and High Performance Computing,
Technische Universität Dresden,
Germany
Cellular automaton models for
collective cell behaviour

2:00-2:30 - Pietro Lio'
Computer Laboratory, University
of Cambridge, UK
Cancer cell dynamics and liquid
biopsies

2:30-3:00 - Edward W. Thommes
Dept. of Mathematics & Statistics,
University of Guelph, Canada

A stochastic compartmental model
of herd immunity within
semi-closed environments

3:00-3:30 Break

*Session Chair of
Contributed Talks:*
Andreas Deutsch

3:30-3:50 - Mark Crowley
Electrical and Computer
Engineering, University of
Waterloo, ON, Canada
*Answering Simple Questions About
Spatially Spreading Systems*

3:50-4:10 - Susan Khor
Memorial University of
Newfoundland, St John's NL,
Canada
*On the short-cut network within
protein residue networks*

4:10-4:30 - Hermann J Eberl
University of Guelph, Guelph, ON,
Canada
*Microscopic rules of multi-species
interaction lead to a class of
macroscopic cross-diffusion
problems*

4:30-4:50 - Michael Andrews
University of Guelph, Guelph, ON,
Canada
*Concurrent Behaviourally
Motivated Non-Pharmaceutical
Intervention and Vaccination
Decisions in an Agent Based Model
of Seasonal Influenza*

6:30 Banquet Dinner at **Il Posto**,
148 Yorkville Ave, Toronto, ON
M5R 1C2 **Website:**
<http://www.ilposto.ca/>
Directions: <http://www.ilposto.ca>

[/Contact/Location/tabid/106091/Default.aspx](#)

Friday: June 19, 2015

8:45-9:00 Breakfast

*Session Chair of
Contributed Talks:*
Daniel Ashlock

9:00-9:30 - Franco Bagnoli

Dept. of Physics and Astronomy
and CSDC, University of Florence,
Italy

*Phase transitions in parallel Ising
model*

9:30-9:50 - Witold Bolt

Systems Research Institute, Polish
Academy of Sciences, Warsaw,
Poland

*Identifying Continuous Cellular
Automata in partial observation
setting using differential evolution*

9:50-10:10 - Raúl Rechtman

Instituto de Energías Renovables,
Universidad Nacional Autónoma
de México

*Anomalous diffusion of
deterministic walks on a square
lattice*

11:00-10:30 Break

*Session Chair of Invited
Talks: **Monica Cojocaru***

10:30-11:00 - Andrea Rapisarda

Dipartimento di Fisica e
Astronomia and Infn - Università
di Catania, Italy

Selective altruism in collective

games

11:00-11:30 - Henry Thille

University of Guelph, Department
of Economics & Finance, Canada
*Speculative Constraints on
Oligopoly*

11:30-12:00 - Jan Baetens

KERMIT, Dept. of Math. Modelling,
Stat. & Bioinformatics, Gent,
Belgium
*Behavioral analysis and
identification of discrete models*

12:00 - 1:30 Lunch

Session Chair of Invited

Talks: Jan Baetens

1:30-2:00 - Rolf Hoffmann

Technical University of Darmstadt,
Germany
*Cellular automata agents can form
a pattern more effectively by using
signs*

2:00-2:30 - Daniel Ashlock

University of Guelph, Guelph, ON,
Canada
*Evolving Transparently Scalable
Level Maps with Cellular Automata*

9:00-9:20 - Henryk Fuks

Brock University, St. Catharines,
ON, Canada
*Hyperbolic and degenerate
hyperbolic behaviour in cellular
automata*

3:00-3:30 Break

Session Chair of

Contributed Talks:

Henryk Fuks

3:30-3:50- Dimitri Papadimitriou

Bell Labs, Antwerpen, Belgium

*Modeling Complex Networks by
(Dynamic) Markov Random Fields***3:50-4:10 - Stephen Trothen**University of Waterloo, Waterloo,
ON, Canada*Cellular Automat(ic) Design and
Finite Nature: Theorizing Human-
Computer Interaction Using
Discreet Mathematical Models***4:10-4:30** Closing Remarks**4:30** End of the Conference[Back to top](#)

Information For Presenters

[Information for presenters can be found here.](#)[Back to top](#)

Contributed Slides

The following presentations were received from registered participants but not delivered at the conference due to last-minute cancellations:

- **Sipang Dirakkhunakon** (Sripatum University,

XIX Symposium on
Condensed Matter Physics
SFKM 2015

Book of Abstracts



Conference attendance patterns

Jelena Smiljanić^a and Marija Mitrović Dankulov^a

^a*Scientific Computing Laboratory, Institute of Physics Belgrade, University of Belgrade*

Abstract. Patterns of scientific publications, collaborations and citations in scientific journals have been extensively studied in last decade while conference attendance patterns remain mostly unexplored from the perspective of statistical physics. In this work we study the conference attendance of scientists on the six conference series in different fields of science. The gathered data contain detailed information about papers/abstracts presented at the conferences for the period of 30 years, which enables us to analyse the total number of participations, number of successive participations and the time lag between two consecutive conference participations for each author. All these properties exhibit broad distributions with exponential cut-off. In order to further investigate the mechanism behind conference attendance patterns, we propose a stochastic model based on two key ingredients, 2-bin generalized Polya process and random termination time of a career. We demonstrate that this model, with positive feedback, can successively reproduce the empirically observed results.



Analyzing the dynamics of information and knowledge landscapes

[Home](#)

[About »](#)

[Working groups »](#)

[STSM](#)

[Exploitation and Impact](#)

[Publications](#)

[Private Area »](#)

[Contact](#)

You are here: [Home](#) » [Second Annual KnowEscape Conference – KnowEscape2014](#) » **Program**

Program

Monday, November 24, 2014

08:45 – 09:15

Conference Registration

09:15 – 09:30

Welcome and Introduction

Prof. Panagiotis Tzionas, Vice – President of [ATEITH](#)

Prof. Christos Sarmaniotis, Director of School of Business Administration and Economics, [ATEITH](#)

Dr. Panayiota Polydoratou, Department of Library Science and Information Systems, [ATEITH](#)

Dr Andrea Scharnhorst, [Royal Netherlands Academy of Arts and Sciences](#) – Chair of KNOWeSCAPE

Categories

- [Knowledge maps](#)
- [STSM](#)
- [Working groups](#)
 - [WG 1: Phenomenology of knowledge](#)

	Chairperson: Almila Akdag Salah	spaces
09:30 – 10:30	Keynote talk: Bettina Speckmann – Geovisualization for library metadata – [Slides]	o WG 2: Theory of knowledge spaces
10:30 – 11:00	Coffee break	o WG 3: Visual analytics of knowledge spaces – knowledge maps
	Morning session I. Chairperson: Andreas Rauber	o WG 4: Data curation and navigation based on knowledge maps
11:00 – 12:30	Petra Ahrweiler – Research Policy Modelling – [Slides] Gali Halevi and Judit Bar-Ilan -Downloads vs. Citations Explored – [Slides] Antonis Sidiropoulos, Dimitrios Katsaros and Yannis Manolopoulos -Identification of Influential Scientists versus Mass Producers by the Perfectionism Index – [Slides]	
12:30 – 14:00	Lunch	
	Chairperson: Renaud Lambiotte	
14:00 – 15:00	Keynote talk: Vincent Traag – Discovering communities in networks – [Slides]	
	Afternoon session I. Chairperson: Santo Fortunato	
15:00 – 16:00	Frank Schweitzer – How we collaborate – A complex network approach – [Slides] Ignite talks: 1. Nikolay Vitanov and Zlatinka Dimitrova – Visualization of composition and characteristics of scientific elites at an Institute of Bulgarian Academy of Sciences – [Slides] 2. Yuriy Holovatch – Interevent time distributions of human multi-level activity in a virtual world – [Slides] 3. Bosiljka Tadic and Marija Mitrovic -The Death of Expertise & Problems in Quantifying Collective Knowledge in Online Social – [Slides] 4. Veslava Osinska and Grzegorz Osinsk – Graphical Analysis of Scientific Collaboration Variations Interactions – [Slides]	
16:00 – 16:30	Coffee break	
	Afternoon session II. Chairperson: Serge Galam	
16:30 – 17:30	Luigi Assom – Overview and Summarize knowledge areas: a dual approach in knowledge mapping and discovery – [Slides]	
17:30 – 18:00	Steering Group (SG) meeting	

Dinner at Restaurant: Yenti (<http://www.yenti.gr>) at 20:00. Meeting place in front of the conference's venue at 19.40.

Address: I. Papareska 13 Eptapyrgio Thessaloniki.

Dinner includes retsina, local beer, red and white wine, refreshments. Dessert is also included.

Tuesday, November 25, 2014

09:00 – 09:30

Conference Registration

Chairperson: Peter Richmond

09:30 – 10:30

Keynote talk: Wim Hugo – Beyond Meta-Data: Nano-Publications Recording Scientific Endeavour –

[Slides]

10:30 – 11:00

Coffee break

11:00 – 12:30

Morning session II. Chairperson: Judit Bar-Ilan

Santo Fortunato – Reputation and Impact in Academic Careers – [Slides]

Marija Mitrovic and Bosiljka Tadic – Quantitative Study of Innovation and Knowledge Building in

Questions&Answers System with Math Tags – [Slides]

Pietro Della Briotta Parolo, Santo Fortunato, Raj Kumar Pan, Kimmo Kaski, Rumi Ghosh and Bernardo

12:30 – 14:00

Lunch
Huberman – On the decay of attention in science – [Slides]

14:00 – 15:00

Chairperson: Almila Akdag Salah

Keynote talk: Zoe Borovsky – UCLA Libraries and the Research Commons – [Slides]

15:00 – 16:00

Afternoon session III. Chairperson: Ingo Scholz

Serge Galam and Alexandre Delanoë – Searching for intended biases behind a “knowledge” map: a case study – [Slides]

KnoweScape - Bibliography of members

Owned by [Andrea Scharnhorst](#)

This is the bibliography of publications of the member of the COST Action TD1210.

Recent papers in this group

There are no papers in this group yet.

[View group](#)

[KnoweScape - Bibliography of members](#) is a group in [Social Sciences](#) on [Mendeley](#).

Ignite talks:

1. Kareen Omar, Oleg Yordanov and Peter Richmond – A Statistical Study of the Wells Wilder
Index – [Slides]
2. Senka Anastasova -E-Knowledge and Rhizomes (Critical Discourses) – [Slides]
3. Jahna Otterbacher -Describing him, describing her: Linguistic biases in crowdsourced metadata
for images of people – [Slides]
4. Beatrice Bouchou Markhoff and Cheikh Niang – Semantic Web Mediation – [Slides]

16:00 – 16:30**Coffee break****16:30 – 17:30****Management Committee (MC) meeting**

*

Boukia Boukia (<http://www.mpoukiampoukia.com/>).

Address: Opoloioiu & Katouni 1 Ladadika Thessaloniki.

Dinner includes a selection of appetizers and salads. It also includes a variety of shared meals served with local wine, beer or refreshments. Excellent dessert is served at the end of our meal!

Wednesday, November 26, 2014**12:30 – 14:00Lunch****09:00 – 09:30****Conference Registration****Chairperson: Peter Richmond****09:30 – 10:30****Keynote talk: Elena Dimitrova – Canalyzation in mathematical modeling – [Slides]****10:30 – 11:00****Coffee break****Morning session III. Chairperson: Frank Schweitze**

11:00 – 12:30

Rob Koopman, Shenghui Wang and Andrea Scharnhorst -Ariadne's thread – interactive navigation in a world of networked information – [Slides]

Ingo Scholtes -Aggregate Networks Considered Harmful: Towards Higher-Order Models of Time-Varying Networks – [Slides]

Peter Mutschke and Karima Haddou Ou Moussa -Using Heat Maps for Search Term Recommendations – [Slides]

Klaus Jacob, Anna-Lena Guske and Thomas Hüsing – Data modelling and visualization in German environmental policies – [Slides]

Chairperson: Panayiota Polydoratou

14:00 – 15:00

Oleg Yordanov – Effects of the Discussion Groups Sizes on the Dynamics of Public Opinion – [Slides]

Henk Van Den Berg, Christine Borgman and Andrea Scharnhorst – Baseline statistics and visuals – opening the black box of users of a Trusted Digital Repository – [Slides]

Andrea Scharnhorst, Albert Meroño-Peñuela and Christophe Guéret – Baseline Statistics of Linked Statistical Data – [Slides]

15:00 – 15:15

Closing remarks

Europe



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Tags

agent-based models algorithms
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 clustering comparison
 Complexity Complex Networks

Resources



Meta

Log in
 Entries RSS
 Comments RSS
 WordPress.org

(for ignite talk)

The Death of Expertise & Problems in Quantifying Collective Knowledge in Online Social Interactions

Bosiljka Tadic* and Marija Mitrovic

Department of Theoretical Physics, Jozef Stefan Institute, Ljubljana, Slovenia

Scientific Computing Laboratory, Institute of Physics, Belgrade, Serbia

Nature of collective states that can arise in online human dynamics depend on many factors from various features of each actor in the process to global system level and the control parameters. States emerging via spreading dynamics, for instance, disease, opinion, or emotions diffusion, are different from the situation where an organized effort to reach a common goal occurs leading to a social value. Building collective knowledge as a social value is coordinated process in which different members are involved in order to create or improve opportunities for the community to deal with the existing problems, i.e., by offering explanations, interpretations, analysis, theories, tools etc. Modern IT enable social interactions along which individual knowledge can be shared with others. Knowledge building implies the occurrence of a collective phenomenon involving innovations and a systematic progression of ideas. However, where such things come from? Knowledge building systems aim at transforming experience of individuals into explicit (codified) knowledge from which then others can learn. The expertise and tacit knowledge (practical intelligence, know-how, innovativeness, intuition) that reside in minds of the individuals is voluntarily shared with other actors via self-organized processes of externalization and communication. Consequently, a collective state appears in which each actor and its contribution have their respective places in the accumulated knowledge. The explicit knowledge can be recognized in view of the appropriate language (or coding) used in this process.

In this ignite talk, by using a prototypal example from online Q&A systems** and theoretical concepts, we would like to point out several specificities in the knowledge building processes. These particular features, ranging from cognitive elements of each actor to their social behavior and patterns of networking, help characterize the development of collective knowledge. At the same time, they provide potentials to differentiate the emergence of knowledge from other collective dynamic phenomena such as shared norms or opinion, in which expertise of individuals is not apparent.

*presenting author

**M.Mitrovic and B. Tadic: *Quantitative study of innovation and knowledge building in Q&A systems with math tagging*, abstract submitted to this conference

(for 20 min talk)

Quantitative Study of Innovation and Knowledge Building in Questions&Answers System with Math Tags

Marija Mitrovic* and Bosiljka Tadic

Scientific Computing Laboratory, Institute of Physics, Belgrade, Serbia
Department of Theoretical Physics, Jozef Stefan Institute, Ljubljana, Slovenia

Online communication systems with Questions and Answers (Q&A) and specified subject tagging provide suitable data for analysis of knowledge building processes. On these sites, interactions among users are conveyed by means of asking and answering or commenting questions. This type of interaction leads to new social phenomena, such as the formation of cross-topic or cross-disciplinary communities, popularity of particular problems, subjects (tags), authors or their solutions. Applying the theory of complex networks and methods of statistical physics, we study the emergence of collective knowledge in Q&A communities.

In this talk, we analyze empirical data from Mathematics, platform for scientific collaboration in the field of mathematics, which is a part of StackExchange: expert answers to your questions network. The dataset contains high temporal resolution of user's actions (asking, answering or commenting) on different questions, as well as tags of these questions. We map this data onto a suitable bipartite network and analyze its structure using the appropriate methods of complex networks. The temporal dimension of the data allows us to study user's activity and expertise patterns by analyzing corresponding time series.

With regard of general problems in quantifying the appearance of collective knowledge, pointed in the ignite talk**, we focus on the dynamical measures of innovation and to relative importance of particular items (tags) in the process. Specifically, we analyze the structure of connections and examine the formation of communities of participants in relation with tags of posted questions. We show that the present tags and their combinations exhibit broad distributions, compatible with Zipf's and Heap's laws, a clear indicator of cooperative dynamics in the system. The entropy of these two type of elements shows substantial clustering among the events related to a particular topic.

*presenting author

**B. Tadic and M. Mitrovic: *The death of expertise & problems in quantifying collective knowledge in online social interactions*, abstract submitted for igniting talk on this conference



SUMMERSOLSTICE 2014
International Conference On
Discrete Models Of Complex Systems

22-25 June 2014, Institute Jozef Stefan, Ljubljana, Slovenia

B O O K
O F
A B S T R A C T S

Edited by

Bosiljka Tadić & Milovan Šuvakov

©Department of Theoretical Physics, Jozef Stefan Institute, Slovenia; June 2014

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Contents

1

Field theoretic description of charge-regulation interaction <i>N.Adžić, R.Podgornik</i>	6
Spin-based description of water in models of biological macromolecules <i>A.Badasyan</i>	7
A self-organized method for risk perception in epidemic spreading on multiplex networks <i>F.Bagnoli, E.Massaro</i>	8
Correlation between economic inequality and mobility in kinetic models for social sciences <i>M.L.Bertotti, G.Modanese</i>	9
Detrending moving average algorithm: a non-random walk through complex systems science <i>A.Carbone</i>	10
Zipf's law and a scaling law, in texts and in music <i>A.Corral</i>	11
Biomimicri as a method for developing cognitive agents <i>B.N.Di Stefano, A.T.Lawniczak</i>	12
ETOS – domain specific language for discrete simulation <i>J.Fišer, J.Škvára</i>	13
Behavioral and network origins of wealth inequality: Insights from a virtual world <i>B.Fuchs, S.Thurner</i>	14
The associating lattice gas in the presence of interacting solutes <i>M.Girardi, M.Szortyka, V.B. Henriques, M.C. Barbosa</i>	15
DNA sequencing by discrete dynamics DNA elongation monitoring <i>A.Grigoryev, A.Manturov</i>	16
Multi-strategy game as a complex system <i>J.Grujić, H.J.Jensen</i>	17
Sociophysics of human virtual dynamics <i>A.Guazzini</i>	18

Ordering colors into strings by agents <i>R.Hoffmann</i>	19
Adding new neurons on the tail of a binomial <i>Z.Kaya, E.Cerasti, A.Treves</i>	20
Dynamical phase transition in the Ising model on scale-free networks <i>A.Krawiecki</i>	21
Endogenous dynamics in financial and economic systems <i>H.Lamba</i>	22
Model of a population of autonomous simple cognitive agents and their performance in various environments <i>A.T.Lawniczak, B.N.Di Stefano, J.Ernst</i>	23
Reconstructing network structure from dynamical signals <i>Z.Levnajić, A.Pikovsky</i>	24
Non-equilibrium phase transitions in the brain <i>J.Marro</i>	25
Interacting scales and coupled phenomena in nature and models <i>R.Melnik</i>	26
Structural properties of complex networks <i>J.Mendes, S.N.Dorogovtsev, A.V.Goltsev, G.Baxter</i>	27
Agent-based modeling and social structure in bloggers' dynamics <i>M.Mitrović, B.Tadić</i>	28
Bargaining with discrete strategies <i>M.Perc</i>	29
Complexity and the evolution of music-production networks <i>G.Percino, P.Klimek, S.Thurner</i>	30
Vogel-Fulcher freezing in relaxor ferroelectrics and dipolar glasses <i>R.Pirc, Z.Kutnjak</i>	31
Interacting particle systems: Integrability vs. universality <i>A.M.Povolotsky</i>	32
Quantifying self-organization and complexity with a wavelet machine? <i>M.Rajković, M.Milanović</i>	33
Micro and macro benefits of random investments in financial markets <i>A.Rapisarda</i>	34
A self-organized method for risk perception in epidemic spreading on multiplex networks <i>R.Rechtman, F.Bagnoli</i>	35
<i>6th Conference Discrete Models of Complex Systems</i>	4

Network growth model with intrinsic vertex fitness <i>G.J.Rodgers</i>	36
From Wilson-Cowan to Kuramoto: Multiplex formulation of neural activity <i>M.Sadilek, S.Thurner</i>	37
Stock price dynamics: Application of simple fluids models and percolation <i>J.Škvára, R.Saňa, J.Škvor</i>	38
A structural and functional network as a tool to analyze complex biological systems <i>V.Stoka, V.Turk</i>	39
New numerical solutions of newtonian three-body problem: Scaling and regularities <i>M.Šuvakov, V. Dmitrašinović</i>	40
Triggering mechanisms in emotion dynamics: From brain activity to collective social behavior <i>B. Tadić, M.Šuvakov</i>	41
Entropies for complex systems <i>S. Thurner</i>	42
A simple one-dimensional model can reproduce the behavior of composite polymer knots <i>L.Tubiana</i>	43
Influence of the grid resolution on output accuracy and parameter sensitivity <i>P.Van der Weeën, B.De Baets</i>	44
Understanding the large scale urban vehicular mobility by discrete models <i>J. Yuan, Y.Li</i>	45
Enhancing network functionalities by manipulating complex networks <i>A.Zeng</i>	46

Ordering colors into strings by agents <i>R.Hoffmann</i>	19
Adding new neurons on the tail of a binomial <i>Z.Kaya, E.Cerasti, A.Treves</i>	20
Dynamical phase transition in the Ising model on scale-free networks <i>A.Krawiecki</i>	21
Endogenous dynamics in financial and economic systems <i>H.Lamba</i>	22
Model of a population of autonomous simple cognitive agents and their performance in various environments <i>A.T.Lawniczak, B.N.Di Stefano, J.Ernst</i>	23
Reconstructing network structure from dynamical signals <i>Z.Levnajić, A.Pikovsky</i>	24
Non-equilibrium phase transitions in the brain <i>J.Marro</i>	25
Interacting scales and coupled phenomena in nature and models <i>R.Melnik</i>	26
Structural properties of complex networks <i>J.Mendes, S.N.Dorogovtsev, A.V.Goltsev, G.Baxter</i>	27
Agent-based modeling and social structure in bloggers' dynamics <i>M.Mitrović, B.Tadić</i>	28
Bargaining with discrete strategies <i>M.Perc</i>	29
Complexity and the evolution of music-production networks <i>G.Percino, P.Klimek, S.Thurner</i>	30
Vogel-Fulcher freezing in relaxor ferroelectrics and dipolar glasses <i>R.Pirc, Z.Kutnjak</i>	31
Interacting particle systems: Integrability vs. universality <i>A.M.Povolotsky</i>	32
Quantifying self-organization and complexity with a wavelet machine? <i>M.Rajković, M.Milanović</i>	33
Micro and macro benefits of random investments in financial markets <i>A.Rapisarda</i>	34
A self-organized method for risk perception in epidemic spreading on multiplex networks <i>R.Rechtman, F.Bagnoli</i>	35
<i>6th Conference Discrete Models of Complex Systems</i>	4

Agent-Based Modeling and Social Structure in Bloggers' Dynamics

Marija Mitrović^{1,2}, Bosiljka Tadić³

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Emotions play pivotal role in both offline and online social dynamics. Although, collective emotional behavior of users is frequently observed in online societies [1, 2, 3], the role of emotions in online communication and their connection with emerging social structure of online communities are still not thoroughly understood.

In this paper, we study mechanisms underlying the collective emotional behavior of Bloggers by using the agent-based modeling and the parameters inferred from the empirical data of popular BBC Blogs and discussion-driven Diggs [4]. Agents, whose individual emotional states are described by their valence and arousal, are embedded in bipartite network of users and posts. This bipartite network evolves through the addition of agents and their actions on posts; agents transfer their current emotional state to post by posting an emotional comment. Emotional state of agent fluctuates in time as a direct consequence of indirect interaction with other agents through its ego-network of posts. We show that the indirect communication of the emotion in the model rules, combined with the action-delay time and the circadian rhythm extracted from the empirical data, can explain the genesis of emotional bursts by users on popular Blogs and similar Web portals.

Our results show that the emotion-driven dynamics leads to long-range correlations and emergent networks with community structure, also observed in analysis of empirical data [1, 2]. We show that the size and activity of evolving agents communities correlates with the expression of negative emotions (critique), see Figure 1.

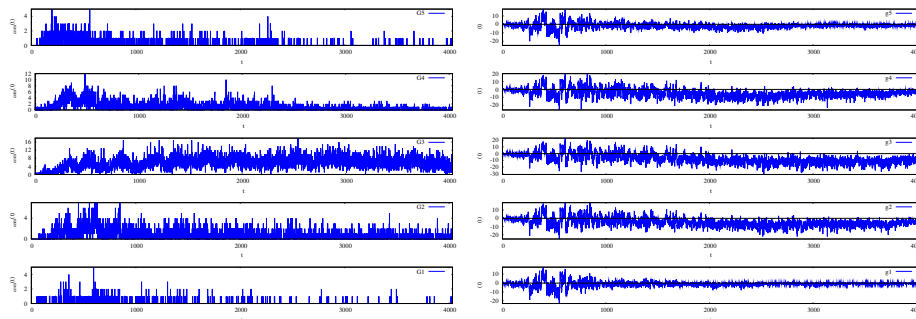


Figure 1: Time series of the number of comments posted by the agents belonging to a given community (left), and the charge of these comments (right).

This work was supported by program P1-0044 of the Research Agency of the Republic of Slovenia and the European Community's program FP7-ICT-2008-3 under the grant no.231323.

References

- [1] Marija Mitrović, Georgios Paltoglou, Bosiljka Tadić, *Networks and emotion-driven user communities at popular blogs*, Eur. Phys. J. B **77**, pp. 597-609 (2010).
- [2] Marija Mitrović, Georgios Paltoglou, Bosiljka Tadić, *Quantitative analysis of bloggers' collective behavior powered by emotions*, Journal of Statistical Mechanics: Theory and Experiment JSTAT P02005 (2011).
- [3] M. Šuvakov, M. Mitrović, V. Gligorijević and B. Tadić, *How the online social networks are used: Dialogs-based structure of MySpace*, J. Royal Society Interface **10**, 79, 20120819 pp. 1-12 (2012).
- [4] Marija Mitrović and Bosiljka Tadić, *Dynamics of bloggers' communities: Bipartite networks from empirical data and agent-based modeling*, Physica A **391** (21), pp. 5264-5278 (2012).

**5th International Conference on
Information Technologies and
Information Society
ITIS 2013**

Proceedings

Edited by Zoran Levnajić
Faculty of Information Studies in Novo mesto

Dolenjske toplice, Slovenia, 7-9 November 2013
<http://itis2013.fis.unm.si/>

CONFERENCE PROGRAM

Thursday, 7 November

08:30 – 09:00 Registration

09:00 – 09:20 Opening

Simulating Social Networks

09:20 – 10:00 Santo Fortunato: Community Detection in Networks

10:00 – 10:20 Mario Karlovčec: Web application for generating sub networks of Slovenian research collaboration

10:20 – 10:40 Borut Lužar: Interdisciplinarity of Slovenian research

10:40 – 11:00 *Sweet coffee break*

Modeling and Simulating Social Processes

11:00 – 11:40 Matteo Marsili: On sampling and modeling complex systems

11:40 – 12:00 Marija Mitrović: Universality in voting behavior

12:00 – 12:20 Zoran Levnajić: Looking for stable pluralism

12:20 – 12:40 Alenka Pandiloska Jurak: Network analysis of the competence centres in Slovenia

12:40 – 13:00 *free*

13:00 – 14:00 *Light lunch*

Data Technologies and Simulations

14:00 – 14:40 Peter Richtárik: Big Data Convex Optimization: Why Parallelizing Like Crazy and Being Lazy Can be Good

14:40 – 15:00 Jože Bučar: Case Study Web Clipping – The Preliminary Work

15:00 – 15:20 Darko Zelenika: Automatic invoice capture in small and medium-sized Slovenian enterprises – project overview

15:20 – 15:40 Tomislav Fotak: Handwritten Signature Authentication Using Statistical Measures of Basic On-line Signature Characteristics

15:40 – 16:00 *Salty coffee break*

Information Society and Simulations

16:00 – 16:20 Andrej Dobrovoljc: An approach to identify organizational security vulnerabilities

16:20 – 16:40 Igor Jugo: A proposal for a web based educational data mining and visualization system

16:40 – 17:00 Gregor Polančič: Extending BPMN 2.0 Conversation diagrams for modeling complex communication

17:00 – 17:20 Martin Ravnikar: The Way to Efficient Management of Complex Engineering Design

17:20 – 17:40 Tatjana Welzer: Cultural Components in Information Society

17:40 – 18:00 *free*

18:00 – *Wine tasting and various*

Friday, 8 November

Simulating Cultural Processes

09:00 – 09:40 Matjaž Perc: Culturomics of physics: Which words and phrases defined the biggest breakthroughs of the 20th century?

09:40 – 10:00 Domagoj Margan: Preliminary Report on the Structure of Croatian Linguistic Co-occurrence Networks

10:00 – 10:20 Kristina Ban: Initial Comparison of Linguistic Networks Measures for Parallel Texts

10:20 – 10:40 Lucia Načinović Prskalo: An Overview of Prosodic Modelling for Croatian Speech Synthesis

10:40 – 11:00 *Sweet coffee break*

Increasing Well-being through IT and Simulations

11:00 – 11:40 Tijana Milenković: What can complex networks tell us about human aging?

11:40 – 12:00 Matjaž Tome: IT solutions to assist diabetic patients and medical staff

12:00 – 12:20 David Fabjan: Long-term-care and intelligent IT in a changing demographic landscape

12:20 – 12:40 Blaž Rodič: Perception of privacy in social networks among youth

12:40 – 13:00 Andrej Kovačič: New Ways to Manage Communication with Customers on the Internet

13:00 – 14:00 *Light lunch*

Simulating Business Processes

14:00 – 14:20 Jernej Agrež: TAD methodology for process pattern assessment in weakly defined organizational formations

14:20 – 14:40 Grzegorz Majewski: Inclusion of tacit knowledge in the simulation of business processes

14:40 – 14:00 Željko Dobrović: Connection between Process Model and Data Model: Metamodelling Approach

15:00 – 15:20 Renato Barišić: Use of printed textbooks and digital content in secondary school education

15:20 – 15:40 Boštjan Delak: How to identify knowledge and evaluate knowledge management in organization

15:40 – 16:00 *free*

16:00 – *Excursion to historic “Žužemberk castle” and conference dinner in traditional “Zupančič” restaurant*

Universality in voting behavior

Marija Mitrović, Arnab Chatterjee, Santo Fortunato

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Abstract. *Statistical physics provides a conceptual framework for studying large-scale social phenomena. Elections represent a valuable area for quantitative study of human behavior. In proportional elections with open lists, the performance of the candidates within the same party list, has the same distribution regardless of the country and the year of the election. The study of election data sets from different countries with open-list proportional systems confirms that nations with similar election rules belong to the same universality class. Deviations from this trend are associated with differences in the election rules. Our analysis reveals that voting process is characterized with dynamics that does not depend on the historical, political or economical context where the voters operate.*



Analyzing the dynamics of information and
knowledge landscapes


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Program

Monday, November 18, 2013

- 09:00 – 09:10 Santo Fortunato – **Welcome**
- 09:10 – 09:20 Andrea Scharnhorst – **Introduction**
*
- Morning session I. Chairman: Santo Fortunato**
*
- 09:20 – 09:50 **Keynote talk: Ginestra Bianconi** – [Multiplex PageRank \[Slides\]](#)
- 09:50 – 10:10 Martin Rosvall – [Mapping scientific communication from researcher pathways \[Slides\]](#)
*
- 10:30 – 11:10 **Coffee break**
*
- Morning session II. Chairman: Bosiljka Tadić**
*
- 11:10 – 11:30 Sébastien Heymann – [Navigating graphs of millions of nodes and relationships like a breeze with Linkurious \[Slides\]](#)
- 11:30 – 12:10 **Ignite talks – Session I**
1. Senka Anastasova – [Live stream transferring knowledge \[Slides\]](#)
 2. Nikolay Vitanov – [Discussion on the geometric measures of the size of the scientific elites \[Slides\]](#)
 3. Sándor Soós- [Topic Trends on the Hungarian Internet – News and Academic Web Presence \[Slides\]](#)
 4. Bruno Gonçalves – [Characterizing scientific production and consumption in Physics \[Slides\]](#)
 5. Vladimir Lekovski – [Knowledge, digital architecture, controlled patterns \[Slides\]](#)
 6. Franc Zakrajšek – [eCultureMap – Link to Europeana knowledge \[Slides\]](#)
 7. Eero Hyvönen – [Linked Data Finland: Towards a 7-star Service Platform for Linked Datasets \[Slides\]](#)
- 12:10-12:15 Wilko van Hoek – [Demonstrating a Framework for KOS-based Recommendations Systems \[Slides\]](#)
*
- 12:15 – 14:00 **Lunch**
*
- Afternoon session I. Chairman: Janusz Holyst**
*
- 14:00 – 14:20 Gergely Palla – [Extracting tag hierarchies \[Slides\]](#)
- 14:20 – 14:40 Bosiljka Tadić – [Network Multiplexity in Online Chats \[Slides\]](#)
- 14:40 – 15:00 Márton Karsai – [Time-varying networks and the weakness of strong ties \[Slides\]](#)
- 15:00 – 15:20 Raj Kumar Pan – [On the Predictability of Future Impact in Science \[Slides\]](#)
*
- 15:20 – 16:00 **Coffee break**
*
- Afternoon session II. Chairman: Peter Richmond**
*
- 16:00 – 16:20 Serge Galam – [The honest dishonest scientist and the unfortunate bias of citation dynamics](#)
- 16:20 – 16:40 Yuriy Holovatch – [A case study of a scientific collaboration: Chernobyl-related research as a collective enterprise \[Slides\]](#)

- 16:40 – 17:00 Ana Baptista – [KNOWeSCAPE related research at the SEMAG research group \[Slides\]](#)
*
- 17:00 – 18:00 **Management committee (MC) meeting**

Tuesday, November 19, 2013

Morning session I. Chairman: Andrea Scharnhorst

*

- 09:00 – 09:30 **Keynote talk: Martin White** – [Collaborative working and decision making – the role of search \[Slides\]](#)
 09:30 – 09:50 Massimo Riccaboni – [Global and domestic centrality in patent citation networks \[Slides\]](#)
 09:50 – 10:10 Veslava Osinska – [Knowledge Horizon Dynamics in Applied Computer Science \[Slides\]](#)
 10:10 – 10:30 Sándor Soós – [Science maps as ways to indicate knowledge transfer \[Slides\]](#)

*

- 10:30 – 11:10 **Coffee break**

*

Morning session II. Chairman: Martin Rosvall

*

- 11:10 – 11:30 Oleg Yordanov – [Chaos at fifty: a statistical perspective \[Slides\]](#)
 11:30 – 12:15 **Ignite talks – Session II**
 1. Claudio Laferla – [Malta, Libraries & Myself \[Slides\]](#)
 2. Wilko van Hoek – [Developing a Visual Interactive Search History Exploration System \[Slides\]](#)
 3. Sanja Šćepanović – [Information diffusion on Twitter based on user homophily and semantic relatedness \[Slides\]](#)
 4. Bosiljka Tadić – [Can we talk? What Bots can do in our cyberspace and does it matter? \[Slides\]](#)
 5. Panos Argyrakis – [Analysis of the network of collaboration between European Institutions \[Slides\]](#)
 6. Milan Rajković – [Knowledge, complexity, self-organization and social systems \[Slides\]](#)
 7. Marija Mitrović – [Universal Pattern of Voting Behavior \[Slides\]](#)

*

- 12:15 – 14:00 **Lunch**

*

Afternoon session I. Chairman: János Kertész

*

- 14:00 – 14:20 Janusz Holyst – [Information slows down hierarchy growth \[Slides\]](#)
 14:20 – 14:40 Renaud Lambiotte – [Late for Good \[Slides\]](#)
 14:40 – 15:00 Shenghui Wang – [Hierarchically structure Cultural Heritage objects \[Slides\]](#)

*

- 15:00 – 15:40 **Coffee break**

*

- 15:40 – 16:40 **Working Groups Discussion**

Wednesday, November 20, 2013

*

Morning session I. Chairman: Aida Slavic

*

- 09:00 – 09:30 **Keynote talk: Cassidy Sugimoto** – [Gender equity and human development in science \[Slides\]](#)
 09:30 – 09:50 Peter Richmond – [Detection of collusion and cheating in multiple choice examinations \[Slides\]](#)
 09:50 – 10:10 Andrea Scharnhorst – [Cross domain knowledge discovery, complex system theory and semantic web \[Slides\]](#)
 10:10 – 10:30 Ingo Scholtes – [The Social Dimension of Collaborative Information Spaces \[Slides\]](#)

*

- 10:30 – 11:10 **Coffee break**

*

Morning session II. Chairman: Maxi San Miguel

*

- 11:10 – 11:30 János Kertész – [The most controversial topics in Wikipedia: A multilingual and geographical analysis \[Slides\]](#)
 11:30 – 11:50 Michael Golosovsky – [Citation dynamics of scientific papers and Bass model for information diffusion \[Slides\]](#)
 11:50 – 12:10 Andias Wira-Alam – [Connecting Knowledge for A New Kind of Search \[Slides\]](#)

*

- 12:10 – 12:20 **Closing Remarks**

*

Universal Pattern of Voting Behavior

MARIJA MITROVIĆ

Department of Biomedical Engineering and Computational Science, Aalto University School of Science, Finland, marija.mitrovic@aalto.fi

ARNAB CHATTERJEE *Department of Biomedical Engineering and Computational Science, Aalto University School of Science, Finland*

SANTO FORTUNATO *Department of Biomedical Engineering and Computational Science, Aalto University School of Science, Finland*

Keywords: *election statistics; voting behavior; universality;*

Statistical physics provides a conceptual framework for studying large-scale social phenomena. Elections represent a valuable area for quantitative study of human behavior. We analyze the candidate performance in proportional elections with nominative votes within the party list. The study of election data sets from different countries with open-list proportional systems confirms that nations with similar election rules belong to the same universality class. Deviations from this trend are associated with differences in the election rules. Our analysis reveals that voting process is characterized with dynamics that does not depend on the historical, political or economical context where the voters operate.

Book of Abstracts

ECCS'12 Brussels European Conference on Complex Systems

www.eccs2012.eu
Brussels, 2-7 September 2012

Editors: Thomas Gilbert and Gregoire Nicolis

Nonlinear Dynamics and Statistical Physics

Chair: Claude Baesens

14:00–14:25 _____ Contributed talk

Complex Systems With Trivial Dynamics

Ricardo Lopez-Ruiz

Abstract: In this communication, complex systems with a near trivial dynamics are addressed. First, under the hypothesis of equiprobability in the asymptotic equilibrium, we show that the (hyper) planar geometry of an N -dimensional multi-agent economic system implies the exponential (Boltzmann-Gibbs) wealth distribution and the spherical geometry of a gas of particles implies the Gaussian (Maxwellian) distribution of velocities. Moreover, two non-linear models will be proposed to explain the decay of these statistical systems from an out-of-equilibrium situation toward their asymptotic equilibrium states.

14:25–14:50 _____ Contributed talk

Flow Curvature Method Applied To Canard Existence In \mathbb{R}^3

Jean-Marc Ginoux and Jaume Llibre

Abstract: The aim of this work is to show that the condition for the generic existence of peculiar solutions, called canards, of three-dimensional slow-fast dynamical systems can be found according to the Flow Curvature Method. This result will be then highlighted with two classical examples.

14:50–15:15 _____ Contributed talk

Extensive Clustering In Populations Of Degraded-And-Fire Oscillators

Bastien Fernandez and Lev Tsimring

Abstract: In this talk, I will present rigorous results on a piecewise affine model of coupled oscillators inspired by recent experiments on synchronization in colonies of bacteria-embedded genetic circuits. The model phenomenology is similar to that of systems of pulse-coupled oscillators with global inhibitory interaction. In a previous work, we proved the existence of a phase transition with the coupling strength, from a regime of arbitrary asymptotic cluster sizes, to a strongly clustered regime where every asymptotic distribution contains an extensive cluster. We also analytically computed the maximal number of asymptotic clusters and showed that, while it decreases in the strong coupling regime, this number stays extensive for every coupling parameter. Here, I will report on manifestations of this phase transition in the dynamics of uniformly drawn random initial conditions. The most significant feature is that, when the coupling strength is sufficiently large, with positive probability, the number of clusters remains intensive in the thermodynamic limit.

15:15–15:30 _____ Contributed talk

Diffusion Of Particle Velocity In The Dense Wave Spectrum Limit

Yves Elskens, Nicolas Besse and Dominique Escande

Abstract: The validity of quasilinear (QL) theory describing the paradigmatic weak warm beam instability has been controversial for decades. We prove that the velocities of N passive particles in a single one-dimensional wave field converge in law to a diffusion process, in the limit of a dense wave spectrum with independent amplitudes and random phases, when the power spectrum is uniform. The proof provides a full probabilistic foundation to the QL approximation and to the ensemble picture for a single realization of the stochastic environment. For the self-consistent Vlasov-wave dynamics, we prove analytically and numerically that in the strongly nonlinear regime where the particle distribution function has formed a plateau and wave intensities have settled, QL predictions remain valid thanks to the absence of mode coupling, and particles evolve in a quenched random wave field. We confirm numerically that the wave power spectrum at saturation agrees statistically with the prediction from the conservation law resulting from the locality in velocity of the wave-particle interaction. We also observe a nonlinear, non-QL stage in the development of the instability, before its saturation.

15:30–15:45 _____ Contributed talk

Out-of-equilibrium Dynamics In Systems With Long-Range Interactions: Characterizing Quasi-Stationary States

Pierre de Buyl

Abstract: Systems with long-range interactions (LRI) display unusual thermodynamical and dynamical properties that stem from the non-additive character of the interaction potential. We focus in this presentation on the lack of relaxation to thermal equilibrium when a LRI system is started out-of-equilibrium. This phenomenon leaves the system in a stage of the dynamics that is called a quasi-stationary state (QSS). Several attempts have been made at predicting the QSS reached by the dynamics and at characterizing the resulting transition between magnetized and non-magnetized states. We review in this work recent theories and interpretations about the QSS. Several theories exist but none of them has provided yet a full account of the dynamics found in numerical simulations.

15:45–16:00 _____ Contributed talk

Ergodic And Nonergodic Behavior In Systems With Long-Range Interactions

Tarcisio Rocha Filho, Annibal Figueiredo, Zolacir Olliveira, Cinthia Silvestre and Marco Amato

Abstract: Physical systems with long-range interaction has been widely studied with results reported in the literature, and properties that are markedly different from short range interacting systems, e.g, non-Gaussian quasi-stationary states, negative heat-capacity, temperature jumps at critical points, anomalous diffusion and ensemble inequivalence. Examples include self-gravitating systems, vortices in two-dimensional fluids, dipolar interactions, fractures in solids and models as the Hamiltonian Mean Field (HMF), free electron laser and the plasma single wave models. The nature of the non-Gaussian quasi-stationary states arising from the dynamics can be interpreted as stable stationary states of the mean-field Vlasov equation which describes the system in the limit $N \rightarrow \infty$, where N is the number of particles. For longer times the Vlasov equation must be replaced by a proper kinetic equation. The initial stage of time evolution is called violent relaxation and corresponds to a very rapid evolution from the initial condition into a quasi-stationary state. Since the original proposal by Lynden-Bell, many unsuccessful attempts were made to formulate the statistical mechanics of violent relaxation. The Lynden-Bell (LB) theory is

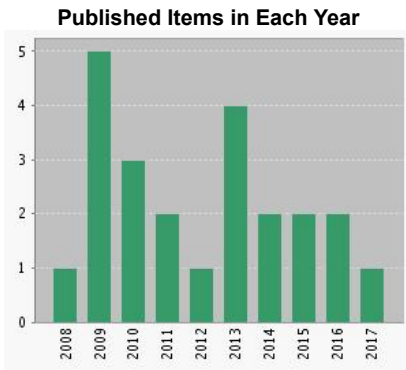


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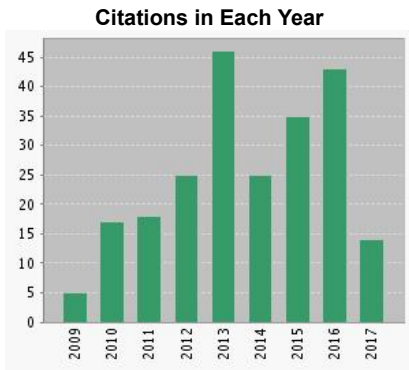
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<input type="checkbox"/> 1. Spectral and dynamical properties in classes of sparse networks with mesoscopic inhomogeneities By: Mitrovic, Marija; Tadic, Bosiljka PHYSICAL REVIEW E Volume: 80 Issue: 2 Article Number: 026123 Published: AUG 2009	5	7	5	7	2	39	4.33
<input type="checkbox"/> 2. Networks and emotion-driven user communities at popular blogs By: Mitrovic, M.; Paltoglou, G.; Tadic, B. EUROPEAN PHYSICAL JOURNAL B Volume: 77 Issue: 4 Pages: 597-609 Published: OCT 2010	11	4	1	0	1	32	4.00
<input type="checkbox"/> 3. Bloggers behavior and emergent communities in Blog space By: Mitrovic, M.; Tadic, B. EUROPEAN PHYSICAL JOURNAL B Volume: 73 Issue: 2 Pages: 293-301 Published: JAN 2010	6	2	1	1	1	26	3.25
<input type="checkbox"/> 4. Universality in voting behavior: an empirical analysis By: Chatterjee, Arnab; Mitrovic, Marija; Fortunato, Santo SCIENTIFIC REPORTS Volume: 3 Article Number: 1049 Published: JAN 10 2013	7	2	4	5	1	19	3.80

<input type="checkbox"/>	5.	Quantitative analysis of bloggers' collective behavior powered by emotions By: Mitrovic, Marija; Paltoglou, Georgios; Tadic, Bosiljka JOURNAL OF STATISTICAL MECHANICS-THEORY AND EXPERIMENT Article Number: P02005 Published: FEB 2011	7	0	4	0	2	18	2.57
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<input type="checkbox"/>	7.	Co-Evolutionary Mechanisms of Emotional Bursts in Online Social Dynamics and Networks By: Tadic, Bosiljka; Gligorijevic, Vladimir; Mitrovic, Marija; et al. ENTROPY Volume: 15 Issue: 12 Pages: 5084-5120 Published: DEC 2013	0	4	4	3	0	11	2.20
<input type="checkbox"/>	8.	How the online social networks are used: dialogues-based structure of MySpace By: Suvakov, Milovan; Mitrovic, Marija; Gligorijevic, Vladimir; et al. JOURNAL OF THE ROYAL SOCIETY INTERFACE Volume: 10 Issue: 79 Article Number: 20120819 Published: FEB 6 2013	2	1	5	3	0	11	2.20
<input type="checkbox"/>	9.	Dynamics of bloggers' communities: Bipartite networks from empirical data and agent-based modeling By: Mitrovic, Marija; Tadic, Bosiljka PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS Volume: 391 Issue: 21 Pages: 5264-5278 Published: NOV 1 2012	4	3	1	2	0	10	1.67
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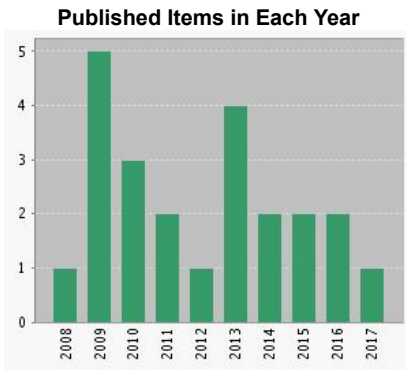


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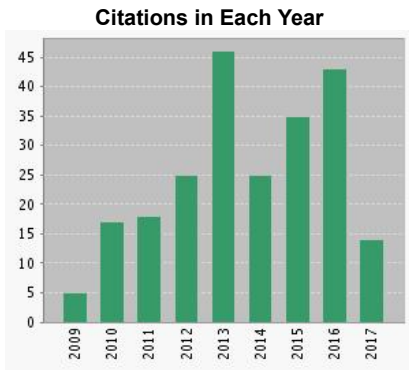
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Use the checkboxes to remove individual items from this Citation Report or restrict to items published between <input type="text" value="1996"/> and <input type="text" value="2017"/> <input type="button" value="Go"/>	46	25	35	43	14	228	25.33
<input type="checkbox"/> 11. Search of weighted subgraphs on complex networks with maximum likelihood methods By: Mitrovic, Marija; Tadic, Bosiljka Edited by: Bubak, M; VanAlbada, GD; Dongarra, J; et al. Conference: 8th International Conference on Computational Science Location: Cracow, POLAND Date: JUN 23-25, 2008 Sponsor(s): Hewlett Packard Co; Intel Corp; Qumak Sekom AM & IBM; Microsoft Corp; ATM SA; Elsevier; Springer COMPUTATIONAL SCIENCE - ICCS 2008, PT 2 Book Series: Lecture Notes in Computer Science Volume: 5102 Pages: 551-+ Published: 2008	0	0	0	0	0	8	0.80
<input type="checkbox"/> 12. Quantifying randomness in real networks By: Orsini, Chiara; Dankulov, Marija M.; Colomer-de-Simon, Pol; et al. NATURE COMMUNICATIONS Volume: 6 Article Number: 8627 Published: OCT 2015	0	0	0	5	2	7	2.33
<input type="checkbox"/> 13. The dynamics of meaningful social interactions and the emergence of collective knowledge By: Dankulov, Marija Mitrovic; Melnik, Roderick; Tadic, Bosiljka SCIENTIFIC REPORTS Volume: 5 Article Number: 12197 Published: JUL 15 2015	0	0	0	5	1	6	2.00

- 14. **Correlation Patterns in Gene Expressions along the Cell Cycle of Yeast**
 By: Zivkovic, Jelena; Mitrovic, Marija; Tadic, Bosiljka
 Edited by: Fortunato, S; Mangioni, G; Menezes, R; et al.
 Conference: International Workshop on Complex Networks (CompleNet 2009)
 Location: Univ Catania, Catania, ITALY Date: MAY 26-27, 2009
 COMPLEX NETWORKS Book Series: Studies in Computational Intelligence
 Volume: 207 Pages: 23-+ Published: 2009
0 0 0 1 0 5 0.56
- 15. **Statistical Analysis of Emotions and Opinions at Digg Website**
 By: Pohorecki, P.; Sienkiewicz, J.; Mitrovic, M.; et al.
 Conference: 6th Polish Symposium of Physics in Economy and Social Sciences (FENS) Location: Univ Gdansk, Fac Math, Phys & Informat, Gdansk, POLAND
 Date: APR 19-21, 2012
 ACTA PHYSICA POLONICA A Volume: 123 Issue: 3 Pages: 604-614
 Published: MAR 2013
1 1 2 0 0 4 0.80
- 16. **Growing time lag threatens Nobels**
 By: Fortunato, Santo
 NATURE Volume: 508 Issue: 7495 Pages: 186-186 Published: APR 10 2014
0 0 1 2 0 3 0.75
- 17. **CYBEREMOTIONS - Collective Emotions in Cyberspace**
 By: Ahn, Junghyun; Borowiec, Anna; Buckley, Kevan; et al.
 Edited by: Giacobino, E; Pfeifer, R
 Conference: 2nd European Future Technologies Conference and Exhibition (FET) Location: Budapest, HUNGARY Date: MAY 04-06, 2011
 Sponsor(s): European Commiss Future & Emerging Technol (FET); European Res Consortium Informat & Mathemat (ERCIM); Hungarian Acad Sci; Hungarian Presidency European Un
 PROCEEDINGS OF THE 2ND EUROPEAN FUTURE TECHNOLOGIES CONFERENCE AND EXHIBITION 2011 (FET 11) Book Series: Procedia Computer Science Volume: 7 Pages: 221-+ Published: 2011
0 0 0 2 0 2 0.29
- 18. **A Theoretical Model for the Associative Nature of Conference Participation**
 By: Smiljanic, Jelena; Chatterjee, Arnab; Kauppinen, Tomi; et al.
 PLOS ONE Volume: 11 Issue: 2 Article Number: e0148528 Published: FEB 9 2016
0 0 0 0 1 1 0.50
- 19. **Network theory approach for data evaluation in the dynamic force spectroscopy of biomolecular interactions**
 By: Zivkovic, J.; Mitrovic, M.; Janssen, L.; et al.
 EPL Volume: 89 Issue: 6 Article Number: 68004 Published: MAR 2010
1 0 0 0 0 1 0.12
- 20. **Associative nature of event participation dynamics: A network theory approach**
 By: Smiljanic, Jelena; Dankulov, Marija Mitrovic
 PLOS ONE Volume: 12 Issue: 2 Article Number: e0171565 Published: FEB 6 2017
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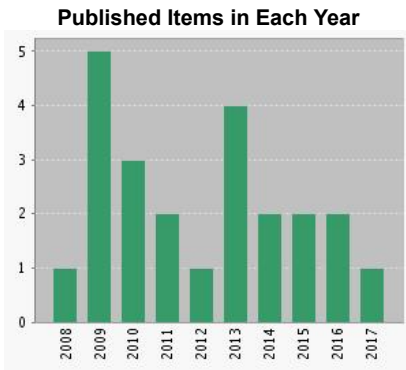


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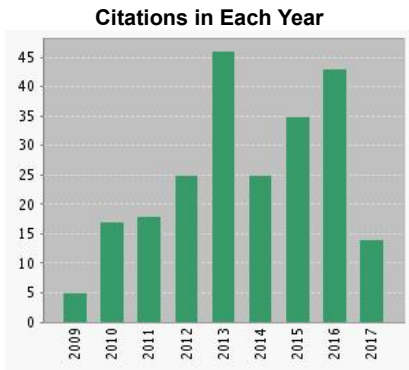
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<input type="checkbox"/> 21. Topology of Innovation Spaces in the Knowledge Networks Emerging through Questions-And-Answers By: Andjelkovic, Miroslav; Tadic, Bosiljka; Dankulov, Marija Mitrovic; et al. PLOS ONE Volume: 11 Issue: 5 Article Number: e0154655 Published: MAY 12 2016	0	0	0	0	0	0	0.00
<input type="checkbox"/> 22. MIXING PATTERNS AND COMMUNITIES ON BIPARTITE GRAPHS ON WEB-BASED SOCIAL INTERACTIONS By: Grujic, Jelena; Mitrovic, Marija; Tadic, Bosiljka Book Group Author(s): IEEE Conference: 16th International Conference on Digital Signal Processing Location: Santorini, GREECE Date: JUL 05-07, 2009 2009 16TH INTERNATIONAL CONFERENCE ON DIGITAL SIGNAL PROCESSING, VOLS 1 AND 2 Pages: 259+ Published: 2009	0	0	0	0	0	0	0.00
<input type="checkbox"/> 23. CONGESTION PATTERNS OF TRAFFIC STUDIED ON NANJING CITY DUAL GRAPH By: Zeng, Hong-Li; Guo, Yan-Dong; Zhu, Chen-Ping; et al. Book Group Author(s): IEEE Conference: 16th International Conference on Digital Signal Processing Location: Santorini, GREECE Date: JUL 05-07, 2009 2009 16TH INTERNATIONAL CONFERENCE ON DIGITAL SIGNAL	0	0	0	0	0	0	0.00

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- 1. **Lower bound of assortativity coefficient in scale-free networks**
By: Yang, Dan; Pan, Liming; Zhou, Tao
[CHAOS](#) Volume: 27 Issue: 3 Article Number: 033113
Published: MAR 2017

Times Cited: 0
(from Web of Science Core Collection)

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- 2. **Quantification of network structural dissimilarities**
By: Schieber, Tiago A.; Carpi, Laura; Diaz-Guilera, Albert; et al.
[NATURE COMMUNICATIONS](#) Volume: 8 Article Number: 13928
Published: JAN 9 2017

Times Cited: 1
(from Web of Science Core Collection)

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- 3. **Constraints and spandrels of interareal connectomes**
By: Rubinov, Mikhail
[NATURE COMMUNICATIONS](#) Volume: 7 Article Number: 13812
Published: DEC 7 2016

Times Cited: 1
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Usage Count
- 4. **A new method based on branch length similarity (BLS) entropy to characterize time series**
By: Lee, Sang-Hee
[JOURNAL OF THE KOREAN PHYSICAL SOCIETY](#) Volume: 69 Issue: 8 Pages: 1362-1365
Published: OCT 2016

Times Cited: 0
(from Web of Science Core Collection)

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- 5. **BRIDES: A New Fast Algorithm and Software for Characterizing Evolving Similarity Networks Using Breakthroughs, Roadblocks, Impasses, Detours, Equals and Shortcuts**
By: Lord, Etienne; Le Cam, Margaux; Bapteste, Eric; et al.
[PLOS ONE](#) Volume: 11 Issue: 8 Article Number: e0161474
Published: AUG 31 2016

Times Cited: 0
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Usage Count
- 6. **Clustering Implies Geometry in Networks**
By: Krioukov, Dmitri
[PHYSICAL REVIEW LETTERS](#) Volume: 116 Issue: 20 Article Number: 208302
Published: MAY 19 2016

Times Cited: 2
(from Web of Science Core Collection)

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- 7. **Network nestedness as generalized core-periphery structures**
By: Lee, Sang Hoon

Times Cited: 1
(from Web of Science Core Collection)

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- Source Titles
- Book Series Titles
- Conference Titles
- Publication Years
- Organizations-Enhanced
- Funding Agencies
- Languages
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022306 Published: FEB 19 2016

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1. **Associative nature of event participation dynamics: A network theory approach**

By: Smiljanic, Jelena; Dankulov, Marija Mitrovic
[PLOS ONE](#) Volume: 12 Issue: 2 Article Number: e0171565
Published: FEB 6 2017

Times Cited: 0
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Usage Count

2. **A Statistical Physics Characterization of the Complex Systems Dynamics: Quantifying Complexity from Spatio-Temporal Interactions**

By: Koorehdavoudi, Hana; Bogdan, Paul
[SCIENTIFIC REPORTS](#) Volume: 6 Article Number: 27602
Published: JUN 14 2016

Times Cited: 1
(from Web of Science Core Collection)

Usage Count

3. **Multifractal analysis of Barkhausen noise reveals the dynamic nature of criticality at hysteresis loop**

By: Tadic, Bosiljka
[JOURNAL OF STATISTICAL MECHANICS-THEORY AND EXPERIMENT](#) Article Number: 063305 Published: JUN 2016

Times Cited: 1
(from Web of Science Core Collection)

Usage Count

4. **Topology of Innovation Spaces in the Knowledge Networks Emerging through Questions-And-Answers**

By: Andjelkovic, Miroslav; Tadic, Bosiljka; Dankulov, Marija Mitrovic; et al.
[PLOS ONE](#) Volume: 11 Issue: 5 Article Number: e0154655
Published: MAY 12 2016

Times Cited: 0
(from Web of Science Core Collection)

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5. **The influence of architecture of nanoparticle networks on collective charge transport revealed by the fractal time series and topology of phase space manifolds**

By: Tadic, Bosiljka; Andjelkovic, Miroslav; Suvakov, Milovan
[JOURNAL OF COUPLED SYSTEMS AND MULTISCALE DYNAMICS](#) Volume: 4 Issue: 1 Pages: 30-42 Published: APR 2016

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6. **Collaborative Solving in a Human Computing Game Using a Market, Skills and Challenges**

By: Tremblay-Savard, Olivier; Butyaev, Alexander; Waldispuhl, Jerome
Book Group Author(s): ACM
Conference: 3rd ACM SIGCHI Annual Symposium on Computer-Human Interaction in Play (CHI PLAY) Location:

Times Cited: 0
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Austin, TX Date: OCT 16-19, 2016
Sponsor(s): Assoc Comp Machinery; ACM SIGCHI
CHI PLAY 2016: PROCEEDINGS OF THE 2016 ANNUAL
SYMPOSIUM ON COMPUTER-HUMAN INTERACTION IN PLAY
Pages: 130-141 Published: 2016

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1. **Changes in Characteristics and Time to Recognition of Medical Scientists Awarded a Nobel Prize**
 By: Redelmeier, Robert J.; Naylor, C. David
[JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION](#)
 Volume: 316 Issue: 19 Pages: 2043-2044 Published: NOV 15 2016

Times Cited: 0
(from Web of Science Core Collection)

Usage Count

2. **The Slavery of the h-index Measuring the Unmeasurable**
 By: Kreiner, Grzegorz
[FRONTIERS IN HUMAN NEUROSCIENCE](#) Volume: 10
 Article Number: 556 Published: NOV 2 2016

Times Cited: 1
(from Web of Science Core Collection)

Usage Count

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3. **The Anatomy of Medical Research US and International Comparisons**
 By: Moses, Hamilton, III; Matheson, David H. M.; Cairns-Smith, Sarah; et al.
[JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION](#)
 Volume: 313 Issue: 2 Pages: 174-189 Published: JAN 13 2015

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- 1. **Big-data-driven modeling unveils country-wide drivers of endemic schistosomiasis**
 By: Mari, Lorenzo; Gatto, Marino; Ciddio, Manuela; et al.
SCIENTIFIC REPORTS Volume: 7 Article Number: 489
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- 2. **Complex systems: physics beyond physics**
 By: Holovatch, Yuri; Kenna, Ralph; Thurner, Stefan
EUROPEAN JOURNAL OF PHYSICS Volume: 38 Issue: 2
 Pages: 1-19 Article Number: 023002 Published: MAR 2017

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- 3. **Towards connecting people, locations and real-world events in a cellular network**
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TELEMATICS AND INFORMATICS Volume: 34 Issue: 1
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- 4. **Application of gravity model on the Korean urban bus network**
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- 5. **Comprehensive analysis of information dissemination in disasters**
 By: Zhang, N.; Huang, H.; Su, Boni
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS Volume: 462 Pages: 846-857 Published: NOV 15 2016

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- 6. **Inferring Passenger Denial Behavior of Taxi Drivers from Large-Scale Taxi Traces**
 By: Zhang, Sihai; Wang, Zhiyang
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- 7. **Predicting human mobility through the assimilation of social media traces into mobility models**
 By: Beiro, Mariano G.; Panisson, Andre; Tizzoni, Michele; et al.
EPJ DATA SCIENCE Volume: 5 Article Number: UNSP 30
 Published: OCT 21 2016

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- 8. **Active and reactive behaviour in human mobility: the influence of attraction points on pedestrians**
 By: Gutierrez-Roig, M.; Sagarra, O.; Oltra, A.; et al.
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 Article Number: UNSP 160177 Published: JUL 2016

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- 9. **Mobile phone data highlights the role of mass gatherings in the spreading of cholera outbreaks**
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PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA Volume: 113 Issue: 23
 Pages: 6421-6426 Published: JUN 7 2016

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- 10. **A survey of results on mobile phone datasets analysis**
 By: Blondel, Vincent D.; Decuyper, Adeline; Krings, Gautier
EPJ DATA SCIENCE Volume: 4 Issue: 1 Article Number: 10
 Published: DEC 2015

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- 11. **Personalized routing for multitudes in smart cities**
 By: De Domenico, Manlio; Lima, Antonio; Gonzalez, Marta C.; et al.
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- 12. **A Generalized Radiation Model for Human Mobility: Spatial Scale, Searching Direction and Trip Constraint**
 By: Kang, Chaogui; Liu, Yu; Guo, Diansheng; et al.
PLOS ONE Volume: 10 Issue: 11 Article Number: e0143500
 Published: NOV 24 2015

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- 13. **Relating Land Use and Human Intra-City Mobility**
 By: Lee, Minjin; Holme, Petter
PLOS ONE Volume: 10 Issue: 10 Article Number: e0140152
 Published: OCT 7 2015

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Times Cited: 3
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- 14. **A Theoretical Analysis of the Geography of Schistosomiasis in Burkina Faso Highlights the Roles of Human Mobility and Water Resources Development in Disease Transmission**
 By: Perez-Saez, Javier; Mari, Lorenzo; Bertuzzo, Enrico; et al.
PLOS NEGLECTED TROPICAL DISEASES Volume: 9 Issue: 10
 Article Number: e0004127 Published: OCT 2015

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- 15. **Understanding Human Mobility from Twitter**
 By: Jurdak, Raja; Zhao, Kun; Liu, Jiajun; et al.
PLOS ONE Volume: 10 Issue: 7 Article Number: e0131469
 Published: JUL 8 2015

Times Cited: 18
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16. **Multi-scale Population and Mobility Estimation with Geo-tagged Tweets**

By: Liu, Jiajun; Zhao, Kun; Khan, Saeed; et al.
Book Group Author(s): IEEE
Conference: 2015 IEEE 31st International Conference on Data Engineering Workshops Location: seoul, SOUTH KOREA Date: APR 13-17, 2015
2015 13TH IEEE INTERNATIONAL CONFERENCE ON DATA ENGINEERING WORKSHOPS (ICDEW) Pages: 83-86
Published: 2015

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17. **Spatial patterns of close relationships across the lifespan**

By: Jo, Hang-Hyun; Saramaki, Jari; Dunbar, Robin I. M.; et al.
[SCIENTIFIC REPORTS](#) Volume: 4 Article Number: 6988
Published: NOV 11 2014

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6. **Universality of Citation Distributions for Academic Institutions and Journals**
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 PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS Volume: 429 Pages: 184-204 Published: JUL 1 2015
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9. **Voting behavior in proportional elections from agent-based models**
 By: Palombi, Filippo; Toti, Simona
 Edited by: Orsitto, FP; Chiarella, V; Chiadroni, E; et al.
 Conference: 3rd International Conference Frontiers in Diagnostic Technologies Location: Rome, ITALY Date: NOV 25-27, 2013
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 3RD INTERNATIONAL CONFERENCE FRONTIERS IN DIAGNOSTIC TECHNOLOGIES, ICFDT3 2013 Book Series: Physics Procedia Volume: 62 Pages: 42-47 Published: 2015
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6. **The dynamics of meaningful social interactions and the emergence of collective knowledge**
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By: Koziol, Z.
Conference: 8th Polish Symposium of Physics in Economy and Social Sciences (FENS) Location: Univ Rzeszow, Rzeszow, POLAND Date: NOV 04-06, 2015
Sponsor(s): Univ Rzeszow, Fac Math & Nat Sci; Warsaw Univ Life Sci, Fac Appl Informat & Math; Polish Phys Soc, Phys Econ & Social Sci Sect; Minist Sci & Higher Educ
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3. **Social Dynamics of the Online Health Communities for Mental Health**
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Conference: Annual International Conference for Smart Health (ICSH) Location: Phoenix, AZ Date: NOV 17-18, 2015
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3. **Finite size induces crossover temperature in growing spin chains**
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By: Cui, Yaozu; Wang, Xingyuan
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6. **A local-world evolving hypernetwork model**
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[CHINESE PHYSICS B](#) Volume: 23 Issue: 1 Article Number: 018901 Published: JAN 2014

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Conference: 16th International Conference on Computer Analysis of Images and Patterns (CAIP) Location: Valletta, MALTA Date: SEP 02-04, 2015
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13. **Predicting Emotional Responses to Long Informal Text** **Times Cited: 9**
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By: Mitrovic, Marija; Tadic, Bosiljka
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16. **Directed Networks of Online Chats: Content-Based Linking and Social Structure** **Times Cited: 1**
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By: Gligorijevic, Vladimir; Skowron, Marcin; Tadic, Bosiljka
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Conference: 8th International Conference on Signal Image Technology and Internet Based Systems (SITIS) Location: Univ Bourgogne, Sorrento, ITALY Date: NOV 25-29, 2012
Sponsor(s): IEEE Comp Soc; INCAR
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- 2. **A Generalized Spatial Measure for Resilience of Microbial Systems**
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 Published: APR 7 2016

Times Cited: 0
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- 3. **New activity pattern in human interactive dynamics**
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[JOURNAL OF STATISTICAL MECHANICS-THEORY AND EXPERIMENT](#) Article Number: P09006
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- 4. **Collective emotion dynamics in chats with agents, moderators and Bots**
 By: Suvakov, M.; Tadic, B.
[CONDENSED MATTER PHYSICS](#) Volume: 17 Issue: 3
 Article Number: 33801
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- 5. **Entropy and the Predictability of Online Life**
 By: Sinatra, Roberta; Szell, Michael
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- 6. **Co-Evolutionary Mechanisms of Emotional Bursts in Online Social Dynamics and Networks**
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13. **Emotional persistence in online chatting communities**

By: Garas, Antonios; Garcia, David; Skowron, Marcin; et al.
[SCIENTIFIC REPORTS](#) Volume: 2 Article Number: 402 Published: MAY 10 2012

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14. **Emotional Analysis of Blogs and Forums Data**

By: Weronki, P.; Sienkiewicz, J.; Paltoglou, G.; et al.
Conference: 5th FENS Symposium on Physics in Economics and

Times Cited: 2
(from Web of Science Core Collection)

Social Sciences Location: Warsaw Univ Life Sci-SGGW, Warsaw, POLAND Date: NOV 25-27, 2010
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 Edited by: Baozong, Y; Qiuqi, R; Xiaofang, T
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 Sponsor(s): IEEE; Chinese Inst Elect; Institut Engrn & Technol; Union Radio Sci Int; Natl Nat Sci Fdn China; IEEE Beijing Sect; IEEE Signal Proc Soc Beijing Chapter; IEEE Comp Soc Beijing Chapter; Japan China Sci & Technol Exchange Assoc; Shenzhen Univ, Intelligent Informat Inst; CIC Commun & Signal Proc Soc; Beijing Jiaotong Univ; CIE Signal Proc Soc
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18. **Negative emotions boost user activity at BBC forum**

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By: Chmiel, Anna; Sobkowicz, Pawel; Sienkiewicz, Julian; et al.
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23. **An agent-based model of collective emotions in online communities** **Times Cited: 40**
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24. **Networks and emotion-driven user communities at popular blogs** **Times Cited: 32**
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Pages: 597-609 Published: OCT 2010
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By: Crane, Riley; Schweitzer, Frank; Sornette, Didier
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Times Cited: 2
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4. **Predicting Student Blood Pressure by Support Vector Machine Using Facebook.**
By: Khan, Shazada Muhammad Umair; Shaikh, Javaria Manzoor; Lee, Scott U. K. Jin
Edited by: Zhang, L.J.; Bahsoon, R
Conference: IEEE World Congress on Services (SERVICES)
Location: Anchorage, AK Date: JUN 27-JUL 02, 2014
Sponsor(s): IEEE; IEEE Comp Soc; IBM Research; SAP; HP; Huawei; Serv Comp; Serv Soc; Cloud Comp; Big Data; IBM; Object Management Grp; Int Journal Business Proc Integrat & Management; ITProgress; Int Journal Web Serv Res; Comp Now; IEEE Transact Serv Comp
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Book Series: IEEE World Congress on Services Pages: 486-492 Published: 2014

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5. **Emotional isolation in BBC Forum**
By: Sienkiewicz, J.; Chmiel, A.
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- By: Weronki, P.; Sienkiewicz, J.; Paltoglou, G.; et al.
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[ACTA PHYSICA POLONICA A](#) Volume: 121 Issue: 2 Pages: B128-B132 Published: FEB 2012
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[JOURNAL OF THE AMERICAN SOCIETY FOR INFORMATION SCIENCE AND TECHNOLOGY](#) Volume: 63 Issue: 1 Pages: 163-173 Published: JAN 2012
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[MULTISCALE MODELING & SIMULATION](#) Volume: 15 Issue: 1 Pages: 537-574 Published: 2017

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14. **Building Dynamic Correlation Network for Financial Asset Returns**
 By: Isogai, Takashi
 Book Author(s): Chbeir, R
 Edited by: Yetongnon, K; Dipanda, A
 Conference: 2015 11th International Conference on Signal-Image Technology & Internet-Based Systems (SITIS) Location: University of Bourgogne, the University of Milan, Bangkok, THAILAND Date: NOV 23-27, 2015
 Sponsor(s): Kasetsart University in Bangkok; LE2I (Laboratoire Electronique, Image et Informatique); University of Bourgogne; UKNOW; Center of Excellence for Unified Knowledge and Language Engineering at Kasetsart University.; IEEE Computer
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15. **Ensemble method: Community detection based on game theory** **Times Cited: 0**
(from Web of Science Core Collection)
By: Zhang, Xia; Xia, Zhengyou; Xu, Shengwu; et al.
[INTERNATIONAL JOURNAL OF MODERN PHYSICS B](#)
Volume: 28 Issue: 30 Article Number: 1450211 Published: DEC 10 2014
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16. **Graph Wavelets for Multiscale Community Mining** **Times Cited: 16**
(from Web of Science Core Collection)
By: Tremblay, Nicolas; Borgnat, Pierre
[IEEE TRANSACTIONS ON SIGNAL PROCESSING](#) Volume: 62
Issue: 20 Pages: 5227-5239 Published: OCT 15 2014
Usage Count
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17. **Discrete particle swarm optimization for identifying community structures in signed social networks** **Times Cited: 15**
(from Web of Science Core Collection)
By: Cai, Qing; Gong, Maoguo; Shen, Bo; et al.
[NEURAL NETWORKS](#) Volume: 58 Special Issue: SI Pages: 4-13 Published: OCT 2014
Usage Count
[Full Text from Publisher](#) [View Abstract](#)
18. **Consensus formation on a simplicial complex of opinions** **Times Cited: 6**
(from Web of Science Core Collection)
By: Maletic, Slobodan; Rajkovic, Milan
[PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS](#) Volume: 397 Pages: 111-120 Published: MAR 1 2014
Usage Count
[Full Text from Publisher](#) [View Abstract](#)
19. **Complex Network Clustering by Multiobjective Discrete Particle Swarm Optimization Based on Decomposition** **Times Cited: 63**
(from Web of Science Core Collection)
By: Gong, Maoguo; Cai, Qing; Chen, Xiaowei; et al.
[IEEE TRANSACTIONS ON EVOLUTIONARY COMPUTATION](#)
Volume: 18 Issue: 1 Special Issue: SI Pages: 82-97
Published: FEB 2014
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20. **Nonparametric resampling of random walks for spectral network clustering** **Times Cited: 8**
(from Web of Science Core Collection)
By: Fallani, Fabrizio De Vico; Nicosia, Vincenzo; Latora, Vito; et al.
[PHYSICAL REVIEW E](#) Volume: 89 Issue: 1 Article Number: 012802 Published: JAN 9 2014
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21. **Extremal Optimization-based Semi-Supervised Algorithm with Conflict Pairwise Constraints for Community Detection** **Times Cited: 1**
(from Web of Science Core Collection)
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By: Li, Lei; Du, Mei; Liu, Guanfeng; et al.
Edited by: Wu, X; Ester, M; Xu, G
Conference: IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM) Location: Beijing, PEOPLES R CHINA Date: AUG 17-20, 2014
Sponsor(s): IEEE; Assoc Comp Machinery; Assoc Comp Machinery SIGKDD; IEEE Comp Soc; IEEE TCDE; Springer; Tencent Internet; Soc Inst; Venustech Informat Technol Co Ltd
2014 PROCEEDINGS OF THE IEEE/ACM INTERNATIONAL

CONFERENCE ON ADVANCES IN SOCIAL NETWORKS
ANALYSIS AND MINING (ASONAM 2014) Pages: 180-187
Published: 2014

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22. **Co-Evolutionary Mechanisms of Emotional Bursts in Online Social Dynamics and Networks** **Times Cited: 11**
(from Web of Science Core Collection)
-  By: Tadic, Bosiljka; Gligorijevic, Vladimir; Mitrovic, Marija; et al.
ENTROPY Volume: 15 Issue: 12 Pages: 5084-5120
Published: DEC 2013
- Usage Count**
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23. **A Visual Analysis Approach for Community Detection of Multi-Context Mobile Social Networks** **Times Cited: 1**
(from Web of Science Core Collection)
- By: Ma, Yu-Xin; Xu, Jia-Yi; Peng, Di-Chao; et al.
JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY
Volume: 28 Issue: 5 Pages: 797-809 Published: SEP 2013
- Usage Count**
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24. **Finding Communities in Credit Networks** **Times Cited: 2**
(from Web of Science Core Collection)
- By: Bargigli, Leonardo; Gallegati, Mauro
ECONOMICS-THE OPEN ACCESS OPEN-ASSESSMENT E-JOURNAL Volume: 7 Article Number: 201317 Published: APR 18 2013
- Usage Count**
- [Full Text from Publisher](#) [View Abstract](#)
25. **How the online social networks are used: dialogues-based structure of MySpace** **Times Cited: 11**
(from Web of Science Core Collection)
-  By: Suvakov, Milovan; Mitrovic, Marija; Gligorijevic, Vladimir; et al.
JOURNAL OF THE ROYAL SOCIETY INTERFACE Volume: 10 Issue: 79 Article Number: 20120819 Published: FEB 6 2013
- Usage Count**
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26. **Hydrogen bond network topology in liquid water and methanol: a graph theory approach** **Times Cited: 14**
(from Web of Science Core Collection)
- By: Bako, Imre; Bencsura, Akos; Hermansson, Kersti; et al.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 15 Issue: 36 Pages: 15163-15171 Published: 2013
- Usage Count**
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27. **Dynamics of bloggers' communities: Bipartite networks from empirical data and agent-based modeling** **Times Cited: 10**
(from Web of Science Core Collection)
-  By: Mitrovic, Marija; Tadic, Bosiljka
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS Volume: 391 Issue: 21 Pages: 5264-5278
Published: NOV 1 2012
- Usage Count**
- [Full Text from Publisher](#) [View Abstract](#)
28. **Understanding Crowd-Powered Search Groups: A Social Network Perspective** **Times Cited: 3**
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- By: Zhang, Qingpeng; Wang, Fei-Yue; Zeng, Daniel; et al.
PLOS ONE Volume: 7 Issue: 6 Article Number: e39749
Published: JUN 27 2012
- Usage Count**
- [Full Text from Publisher](#) [View Abstract](#)
29. **Random digraphs with given expected degree sequences: A model for economic networks** **Times Cited: 11**
(from Web of Science Core Collection)
- By: Bargigli, Leonardo; Gallegati, Mauro
JOURNAL OF ECONOMIC BEHAVIOR & ORGANIZATION
Volume: 78 Issue: 3 Pages: 396-411 Published: MAY 2011
- Usage Count**

-
30. **Spectra of modular and small-world matrices** **Times Cited: 16**
(from Web of Science Core Collection)
 By: Kuehn, Reimer; van Mourik, Jort
 JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL Volume: 44 Issue: 16 Article Number: 165205 Published: APR 22 2011
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31. **Quantitative analysis of bloggers' collective behavior powered by emotions** **Times Cited: 18**
(from Web of Science Core Collection)
 By: Mitrovic, Marija; Paltoglou, Georgios; Tadic, Bosiljka
 JOURNAL OF STATISTICAL MECHANICS-THEORY AND EXPERIMENT Article Number: P02005 Published: FEB 2011
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32. **A Method for Finding Groups of Related Herbs in Traditional Chinese Medicine** **Times Cited: 2**
(from Web of Science Core Collection)
 By: Wang, Lidong; Zhang, Yin; Wei, Baogang; et al.
 Book Author(s): Wang, JY
 Edited by: Tang, J; King, I; Chen, L
 Conference: 7th International Conference on Advanced Data Mining and Applications Location: Beijing, PEOPLES R CHINA Date: DEC 17-19, 2011
 Sponsor(s): IBM; China Samsung Telecom R&D Ctr; Tsinghua Univ
 ADVANCED DATA MINING AND APPLICATIONS, PT I Book Series: Lecture Notes in Artificial Intelligence Volume: 7120 Pages: 55+ Published: 2011
Usage Count
33. **Modelling conflicts with cluster dynamics in networks** **Times Cited: 2**
(from Web of Science Core Collection)
 By: Tadic, Bosiljka; Rodgers, G. J.
 PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS Volume: 389 Issue: 23 Pages: 5495-5502 Published: DEC 1 2010
Usage Count
34. **Networks and emotion-driven user communities at popular blogs** **Times Cited: 32**
(from Web of Science Core Collection)
 By: Mitrovic, M.; Paltoglou, G.; Tadic, B.
 EUROPEAN PHYSICAL JOURNAL B Volume: 77 Issue: 4 Pages: 597-609 Published: OCT 2010
Usage Count
35. **On the distributions of Laplacian eigenvalues versus node degrees in complex networks** **Times Cited: 19**
(from Web of Science Core Collection)
 By: Zhan, Choujun; Chen, Guanrong; Yeung, Lam F.
 PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS Volume: 389 Issue: 8 Pages: 1779-1788 Published: APR 15 2010
Usage Count
36. **Network theory approach for data evaluation in the dynamic force spectroscopy of biomolecular interactions** **Times Cited: 1**
(from Web of Science Core Collection)
 By: Zivkovic, J.; Mitrovic, M.; Janssen, L.; et al.
 EPL Volume: 89 Issue: 6 Article Number: 68004 Published: MAR 2010
Usage Count
37. **Community detection in graphs** **Times Cited: 2,501**
(from Web of Science Core Collection)

By: Fortunato, Santo
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS
LETTERS Volume: 486 Issue: 3-5 Pages: 75-174 Published:
FEB 2010

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- 38. **Bloggers behavior and emergent communities in Blog space**



By: Mitrovic, M.; Tadic, B.
EUROPEAN PHYSICAL JOURNAL B Volume: 73 Issue: 2
Pages: 293-301 Published: JAN 2010

Times Cited: 26
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 Times Cited: 18
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By: Mitrovic, M.; Paltoglou, G.; Tadic, B.
EUROPEAN PHYSICAL JOURNAL B Volume: 77 Issue: 4 Pages: 597-609 Published: OCT 2010
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- 3. **Bloggers behavior and emergent communities in Blog space**
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EUROPEAN PHYSICAL JOURNAL B Volume: 73 Issue: 2 Pages: 293-301 Published: JAN 2010
 Times Cited: 26
(from Web of Science Core Collection)
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- 4. **Spectral and dynamical properties in classes of sparse networks with mesoscopic inhomogeneities**
By: Mitrovic, Marija; Tadic, Bosiljka
PHYSICAL REVIEW E Volume: 80 Issue: 2 Article Number: 026123 Published: AUG 2009
 Times Cited: 39
(from Web of Science Core Collection)
Usage Count
- 5. **The weighted random graph model**
By: Garlaschelli, Diego
NEW JOURNAL OF PHYSICS Volume: 11 Article Number: 073005 Published: JUL 3 2009
 Times Cited: 18
(from Web of Science Core Collection)
Usage Count
- 6. **MIXING PATTERNS AND COMMUNITIES ON BIPARTITE GRAPHS ON WEB-BASED SOCIAL INTERACTIONS**
By: Grujic, Jelena; Mitrovic, Marija; Tadic, Bosiljka
Book Group Author(s): IEEE
Conference: 16th International Conference on Digital Signal Processing Location: Santorini, GREECE Date: JUL 05-07, 2009
2009 16TH INTERNATIONAL CONFERENCE ON DIGITAL SIGNAL PROCESSING, VOLS 1 AND 2 Pages: 259-+ Published: 2009
 Times Cited: 0
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7. **Finding Community Structure Based on Subgraph Similarity**

By: Xiang, Biao; Chen, En-Hong; Zhou, Tao
Edited by: Fortunato, S; Mangioni, G; Menezes, R; et al.
Conference: International Workshop on Complex Networks (CompleNet 2009) Location: Univ Catania, Catania, ITALY Date: MAY 26-27, 2009
COMPLEX NETWORKS Book Series: Studies in Computational Intelligence Volume: 207 Pages: 73+ Published: 2009

Times Cited: 10
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ИЗВЕШТАЈ РУКОВОДИОЦА
О РАДУ - ИСТРАЖИВАЧА ДОКТОРАНТА
укљученог на пројекат Министарства

I. ОПШТИ ПОДАЦИ

1. Име и презиме докторанта: Јелена Смиљанић
2. Институт - факултет (НИО запослења): Институт за физику у Београду
3. Ментор
 - име и презиме Марија Митровић Данкулов
 - звање ... научни сарадник
 - (НИО запослења ментора) Институт за физику у Београду
4. Ментор овог докторанта је од 01.08.2013.
5. Пројекат на коме је докторант ангажован
 - назив пројекта Моделирање и нумеричке симулације сложених вишечестичних система
 - евиденциони број пројекта ОН171017

II. АНГАЖОВАЊЕ ДОКТОРАНТА – ИСТРАЖИВАЧА ДОКТОРАНТА

6. Врста ангажовања докторанта у оквиру научноистраживачког рада (написати конкретно шта је радио и да ли има публиковане радове/где и повезаност послова са докторатом)
Јелена Смиљанић се на пројекту ОН171017 бави анализом структурних и динамичких особина реалних социјалних мрежа. У претходном периоду њен рад се односио на проучавање структуре и динамике мрежа у социјалним групама чија је динамика условљена учешћем чланова групе у њеним активностима, догађајима. Конкретно, колегица је одредила тополошке карактеристике значајне за структуру социјалних мрежа у овим системима, а затим анализирали њихову еволуцију са порастом ангажовања чланова групе у њеним активностима, као и

њихову зависност од величине појединачних догађаја. Ово је део доктората колегице, чија се одбрана очекује у 2017. години.

Радови докторанткиње објављени у научним часописима међународног значаја:

[M22] J. Smiljanić and I. E. Stanković: "Efficient Routing on Small Complex Networks Without Buffers", *Physica A: Stat. Mech. App.* **392**, 2294 (2013).

[M21a] J. Smiljanić, M. Žeželj, V. Milanović, J. Radovanović, and I. Stanković: "MATLAB-based program for optimization of quantum cascade laser active region parameters and calculation of output characteristics in magnetic field", *Comput. Phys. Commun.* **185**, 998-1006 (2014).

[M21] J. Smiljanić, A. Chatterjee, T. Kauppinen and M. Mitrović Dankulov: "A Theoretical Model for the Associative Nature of Conference Participation", *PLoS ONE* **11**, e0148528 (2016).

[M21] J. Smiljanić and M. Mitrović Dankulov: "Associative nature of event participation dynamics: a network theory approach", *PLoS ONE* (in press), (2017).

Зборници водећег међународног значаја штампани у целини:

[M13] I.E. Stanković, M. Žeželj, J. Smiljanić, and A. Belić, "Modeling of Disaster Spreading Dynamics", in M. Dulea et al. (Eds.), *High-Performance Computing Infrastructure for South East Europe's Research Communities*, Springer Series in Modeling and Optimization in Science and Technologies 2, 31-42, (2014).

Радови у националним часописима:

[M53] J. Smiljanić, M. Žeželj, I. E. Stanković: "Ispitivanje strategija za rutiranje u malim kompleksnim mrežama", *Telekomunikacije*, vol. 10, 54-63 (2012), Ratel.

Зборници међународних научних скупова штампани у изводу:

[M34] I. Stanković and J. Smiljanić: "Structure of complex networks for minimizing traffic congestion and cost", DPG 2012 Conference, Berlin, Germany.

[M34] Igor Stanković, Milan Žeželj, and Jelena Smiljanić, "Numerical Simulations of the Structure and Transport Properties of the Complex Networks", HP-SEE User Forum 2012, Belgrade, Serbia.

[M34] J. Smiljanić and M. M. Dankulov: "Conference Attendance Patterns", The 19th Symposium on Condensed Matter Physics - SFKM (2015), 2015, Belgrade, Serbia.

[M34] J. Smiljanić and M. M. Dankulov: "Associative nature of conference participation", The 41st Conference of the Middle European Cooperation in Statistical Physics - MECO (2016), 2016, Vienna, Austria.

Зборници националих научних скупова штампани у изводу:

[M64] J. Smiljanić and P. Ivaniš: "Attacks on the RSA cryptosystem using integer factorization", TELFOR 2011, Belgrade, Serbia.

[M64] J. Smiljanić and M. M. Dankulov: "Associative nature of conference participation dynamics: an empirical analysis and modeling", Fourth conference on Information theory and complex systems - TINKOS (2016), 2016, Belgrade, Serbia.

7. Да ли је докторант био ангажован на другим пословима у тој НИО:

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10. Изнесите своје предлоге за побољшање услова и резултата рада докторанта чији сте ментор:

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Датум 03.07.2017

Докторант

Ментор

Јелена Смиљанић
Јелена Смиљанић

Декан/Директор

др Александар Богојевић
др Александар Богојевић



Др Марија Митровић Данкулов
Др Марија Митровић

Данкулов

Руководилац пројекта

др Антун Балаж
др Антун Балаж



ПОТВРДА О МЕНТОРСТВУ

Овим потврђујем да је научни сарадник **др Марија Митровић Данкулов**, за коју се покреће избор у звање виши научни сарадник, у оквиру Лабораторије за примену рачунара у науци Националног центра изузетних вредности за изучавање комплексних система Института за физику у Београду, односно у оквиру пројекта ОН171017 „Моделирање и нумеричке симулације сложених вишечестичних система“, ментор за докторску тезу Јелене Смиљанић. Јелена Смиљанић је студент докторских студија на Електротехничком факултету Универзитета у Београду, израда њене докторске тезе је у завршној фази, а тема је већ одбрањена и прихваћена.

Београд, 30. мај 2017. године

др Антун Балаж
научни саветник

Руководилац пројекта ОН171017

Руководилац Центра за изучавање комплексних
система Института за физику у Београду



ПОТВРДА О РУКОВОЂЕЊУ ПОТПРОЈЕКТОМ

Овим потврђујем да научни сарадник **др Марија Митровић Данкулов** за коју се покреће избор у звање виши научни сарадник, у оквиру Лабораторије за примену рачунара у науци Националног центра изузетних вредности за изучавање комплексних система Института за физику у Београду, односно у оквиру пројекта ОН171017 „Моделирање и нумеричке симулације сложених вишечестичних система“ руководи потпројектом: „Моделирање комплексних нелинеарних динамичких система“. На поменутом потпројекту су ангажовани следећи истраживачи: др Марија Митровић Данкулов, др Игор Франовић, Јелена Смиљанић и Ива Бачић.

Београд, 30. мај 2017. године

др Антун Балаж
научни саветник

Руководилац пројекта ОН171017
Руководилац Центра за изучавање комплексних
система Института за физику у Београду



Београд, 13. јул 2015.

У циљу успешног реализовања задатака који стоје пред Институтом за физику у текућем мандатном периоду, а посебно задатака везаних за спровођење иновационих делатности, комерцијализације нових знања и производа доносим следећу:

О Д Л У К У

Именује се др Марија Митровић Данкулов за заменика руководиоца Иновационог центра Института за физику, организационе јединице која је основни носиоц иновационе делатности у нашој институцији и која директно одговара канцеларији директора.

Ова одлука ступа на снагу на данашњи дан.



др Александар Богојевић, директор
Институт за физику



You are here: [Home](#) | [COST Actions](#) | [Transport and Urban Development \(TUD\)](#) | [TU1305](#) | [Management Committee](#)

TUD COST Action TU1305

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MC Vice Chair	Prof Bridgette WESSELS (UK)

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WG Leader	Prof Sven KESSELRING
WG Leader	Prof Isabelle THOMAS
WG Leader	Ms Lucia CRISTEA

- Data registration in e-COST pending subject to online registration and nomination acceptance by nominee.

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Bosnia and Herzegovina	Dr Haris GEKIC
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United Kingdom	Dr Patricia MELO
United Kingdom	Dr Jasna MARIOTTI

Transport and Urban Development COST Action TU1305

Description

Parties

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General Information*

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Vice Chair of the Action:
[Prof Bridgette WESSELS \(UK\)](#)

Science officer of the Action:
[Dr Mickael PERO](#)

Administrative officer of the Action:
[Ms Nasrine MALANDA](#)

Downloads*

Action Fact Sheet
[Download AFS as .RTF](#)

Memorandum of Understanding
[Download MoU as PDF](#)

Websites*

Action website:
<http://www.tu1305.eu/>

* content provided by e-COST.
Data is synchronised once per night.



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Framework Programme Horizon
2020

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Sitemap

Subject invitation to SocInfo2017 program committee
From EasyChair <noreply@easychair.org>
To Marija Mitrovic <marija.mitrovic@ipb.ac.rs>
Date 2017-04-14 01:58



This letter of invitation to the program committee of SocInfo2017 was sent to you by the EasyChair user Taha Yasseri <taha.yasseri@oii.ox.ac.uk>. To accept or decline this invitation and/or answer the letter please access https://easychair.org/conferences/pcinvite_view.cgi?code=kutAqweZZPxFmsUTMzGR.

Please only reply to this letter through the provided link or send your reply to taha.yasseri@oii.ox.ac.uk. If you try to reply to this letter using your mailer, the reply will NOT reach Taha Yasseri

Dear Marija,

As you may know, the 9th International Conference on Social Informatics is being held in Oxford this September: <http://socinfo2017.oii.ox.ac.uk/>

We would like to invite you to the Programme Committee.

The review process commence on 1 June 2017. The deadline for the reviews will be 15 June 2017.

We would appreciate if you could accept our invitation.

Best regards,
Taha Yasseri <taha.yasseri@oii.ox.ac.uk>

Best regards,
EasyChair messenger.

Please do not reply to this email. This email address is used only for sending email so you will not receive a response.

Subject Invitation to CCS'17 program committee
From EasyChair <noreply@easychair.org>
To Marija Mitrovic <marija.mitrovic@ipb.ac.rs>
Date 2017-01-24 16:48



This letter of invitation to the program committee of CCS'17 was sent to you by the EasyChair user Carlos Gershenson <cgg@unam.mx>. To accept or decline this invitation and/or answer the letter please access https://easychair.org/conferences/pcinvite_view.cgi?code=UmsxwHzwCIclvbsazoLs.

Please only reply to this letter through the provided link or send your reply to cgg@unam.mx. If you try to reply to this letter using your mailer, the reply will NOT reach Carlos Gershenson

Dear Marija,

It is a pleasure to invite you to serve a program committee member for the Information and Communication Technologies track at the Conference on Complex Systems 2017 (CCS'17), to be held on September 17th-22nd in Cancun, Mexico <http://ccs17.unam.mx/>. Sponsored by the Complex Systems Society <http://cssociety.org>, this is the largest conference on complex systems and will take place in Latin America for the first time.

Program committee members are expected to review not more than ten abstracts (less than 500 words each). Bidding and review will take place between March 17th and April 14th.

We would also like to ask you to promote the conference through your social networks and consider presenting your work in Cancun.

Below are the proposed topics for this track.

Best regards,
Carlos Piña, track chair
Carlos Gershenson and José Luis Mateos, CCS'17 co-chairs
<http://ccs17.unam.mx/>

Track topics:
Computer science
Internet
WWW
Search
Semantic web
Online social networks
Behavioral science
Big data analytics
Data science
Networked computer systems
Socio-technical systems
Complex networks data mining
Community Structure in Complex Networks
Community Discovery in Complex Networks
Complex Networks and Epidemics

Large-scale Graph Analytics
Visual Representation of Complex Networks
Applications of Complex Network Analysis
Social Reputation, Influence, and Trust
Information Spreading in Social Media
Rumor and Viral Marketing in Social Networks
Communication and Information Complex Networks
Social media mining
Urban social networks
Multi-agent systems
Cellular automata
Neural networks
Evolutionary computation

Best regards,
EasyChair messenger.

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Subject COMPLEXIS 2017 - Program Committee Invitation
From COMPLEXIS Secretariat <program.committee@insticc.org>
Sender <program.committee@insticc.org>
To <marija.mitrovic@ipb.ac.rs>
Date 2016-11-23 14:22



Dear Dr. Marija Mitrović Dankulov,

We are organizing a conference entitled "2nd International Conference on Complexity, Future Information Systems and Risk" - COMPLEXIS 2017 (<http://www.complexis.org/>) and given your expertise in some of the conference topics, we would like to kindly invite you to join its International Program Committee.

There will be two different reviewing periods:

1. The regular papers reviewing period that is scheduled to end by 1 February 2017. A regular paper presents a work where the research is completed or almost finished.
2. The position papers reviewing period that is scheduled to end by 20 February 2017. A position paper presents an arguable opinion about an issue. The goal of a position paper is to convince the audience that your opinion is valid and worth listening to, without the need to present completed research work and/or validated results.

Should you decide to give us the honor of accepting our invitation, kindly follow the link <http://www.insticc.org/Primoris/AcceptInvitation.aspx?ID=mR5wtEyRBos=&reviewerType=5CvzVFbX1JYZLkDBKK10bfTrQFGE6CqJ&t=1>.

Should you be unavailable to join our International Program Committee kindly follow the link <http://www.insticc.org/Primoris/RejectInvitation.aspx?ID=mR5wtEyRBos=&reviewerType=5CvzVFbX1JYZLkDBKK10bfTrQFGE6CqJ&t=1> .

Looking forward to welcoming you in the Program Committee of COMPLEXIS 2017 to succeed in building a high-quality event, which will be prestigious for all parties involved.

Kind regards,
Ana Guerreiro
On behalf of COMPLEXIS's Secretariat

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Jannik Laval

University of Lyon2, France

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Vinko	Zlatic	Rudjer Boskovic Institute	Croatia

Webmaster

Matteo Zignani, University of Milan, Italy

The International Conference on Complex Networks and Their Applications

Subject invitation to COMPLEX NETWORKS 2016 program committee
From EasyChair <noreply@easychair.org>
To Marija =?UTF-8?B?TWI0cm92acSH?=<Marija.Mitrovic@scl.rs>
Date 2016-09-20 14:23



This letter of invitation to the program committee of COMPLEX NETWORKS 2016 was sent to you by the EasyChair user Hocine Cherifi <hocine.cherifi@gmail.com>. To accept or decline this invitation and/or answer the letter please access https://easychair.org/conferences/pcinvite_view.cgi?code=1cIAbpA5jKVuygBIyM4T.

Please only reply to this letter through the provided link or send your reply to hocine.cherifi@gmail.com. If you try to reply to this letter using your mailer, the reply will NOT reach Hocine Cherifi

Dear Marija,

It gives me great pleasure to ask if you would be willing to join the Program Committee of the Fifth Workshop on Complex Networks and their Applications to be held in Milan, 30 November 02 December 2016.

<http://www.complexnetworks.org/index.html>

This year we accept both papers and abstracts

The submission deadline was September 18, 2016 and we are expecting receiving reviews by October 09, 2016.

I do very much hope that you will be able to accept this invitation.

Yours sincerely

Hocine Cherifi

University of Burgundy, France

Best regards,
EasyChair messenger.

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3rd Conference on Sustainable Urban Mobility (3rd CSUM)

<http://www.csum.civ.uth.gr/>

26 – 27 May 2016
Volos, Greece



Organized by:

University of Thessaly
Department of Civil Engineering
Traffic, Transportation and
Logistics Laboratory – TTLog

With the support of:

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Juan de Ona	Spain	University of Granada
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Tamas Tettamanti	Hungary	Budapest University of Technology and Economics
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Harry J.p. Timmermans	Netherlands	Eindhoven University of Technology
Francesco Viti	Luxembourg	University of Luxembourg
Lidia Zakowska	Poland	Politechnika Krakowska

Contact Details

Conference Secretariat
Tel.: +30-2421074164, +30-2421074158
Fax: +30-2421074131
E-mail: infocsum@civ.uth.gr

Subject invitation to IC2S2 program committee
From EasyChair <noreply@easychair.org>
To Marija Mitrovic <marija.mitrovic@ipb.ac.rs>
Date 2015-10-26 23:34



This letter of invitation to the program committee of IC2S2 was sent to you by the EasyChair user Nancy Mclaughlin <n-mclaughlin@northwestern.edu>. To accept or decline this invitation and/or answer the letter please access https://easychair.org/conferences/pcinvite_view.cgi?code=fvpZbHn59HuZi4da0ebN.

Please only reply to this letter through the provided link or send your reply to n-mclaughlin@northwestern.edu. If you try to reply to this letter using your mailer, the reply will NOT reach Nancy Mclaughlin

Dear Marija,

We would like to invite you to join the program committee of the Second Annual International Conference on Computational Social Science (IC2S2 2016, <http://www.kellogg.northwestern.edu/news-events/conference/ic2s2/2016.aspx>), to be held at the Kellogg School of Management of Northwestern University in Evanston, USA, from June 23 to June 26, 2016.

IC2S2 is an interdisciplinary event designed to engage a broad community of researchers - academics, industry experts, open data activists, government agency workers, and think tank analysts - dedicated to advancing social science knowledge through computational methods. This event affords the opportunity to meet and discuss works in which social systems and dynamics are investigated in a quantitative way through large datasets that are either mined from various sources (e.g. social media, communication systems), or created via controlled experiments or computational modeling.

The event is the merger of two successful conferences: the Computational Social Science Summit (CSSS16, (<http://www.kellogg.northwestern.edu/news-events/conference/csss/2015.aspx>)), hosted by the Kellogg School of Management at Northwestern University, IL USA, and the International Conference on Computational Social Science (IC2S2 2015, <http://www.iccss2015.eu/>), that took place in Helsinki, Finland.

This is the list of invited speakers (all confirmed):

Susan Athey, Stanford
Dirk Brockman, Humboldt University Berlin
Rosaria Conte, Institute for Cognitive Science and Technology Rome
Peter Dodds, University of Vermont
Dave Ferucci, Bridgewater Associates (formerly Head of IBM Watson)
Sandra Gonzalez-Bailon, University of Pennsylvania
Michael Kearns, University of Pennsylvania
Jon Kleinberg, Cornell University
David Lazer, Northeastern University Boston
Alexandro Lomi, University of Lugano
Sendhil Mullainathan, Harvard University
Matt Salganik, Princeton University

Markus Strohmaier, GESIS Cologne
Balazs Vedres, Central European University Budapest

As a program committee member, you are expected to review a maximum of 8 submissions (consisting of extended abstracts of max 2/3 pages) and possibly make discussions with other PC members who are reviewing the same contributions.

The important dates of the conference are listed as follows:

Paper Submission: 25 November 2015 - 31 January 2016
Paper bidding: 1 February - 15 February 2016
Paper Assignment: 20 February 2016
Review Due: 31 March 2016
Notification: 30 April 2016
Conference: 23-26 June 2016

We sincerely hope that you can accept our invitation. We look forward to hearing your positive answer! Please log onto the conference management system for IC2S2 2016 to answer our invitation.

<https://easychair.org/conferences/?conf=ic2s20>

Thanks,
Noshir Contractor, Brian Uzzi & Duncan Watts
Co-chairs, IC2S2 2016

Best regards,
EasyChair messenger.

Please do not reply to this email. This email address is used only for sending email so you will not receive a response.

ITIS 2016

TALKS AND POSTERS

We invite all scientists working in the fields covered by the conference (or close to them) to present their work. You can choose between a short talk (~20 min) and a poster.

Abstracts are submitted no later than NOVEMBER 5 following this [link](#).

We will have all submitted abstracts reviewed by our **Program Committee** and notify you about their decision within few days.

Taha Yasseri, University of Oxford, UK

Franjo Cecelja, University of Surrey, UK

Marko Budišić, University of Wisconsin Madison, USA

Jelena Grujić, Free University Brussels, Belgium

Markus Abel, Potsdam University, Germany

Marta Sales, Rovira i Virgili University, Tarragona, Spain

Roger Guimera, Rovira i Virgili University, Tarragona, Spain

Andrea Guazzini, University of Florence, Italy

Daniele Vilone, University of Florence, Italy

Davide Rossi, University of Bologna, Italy

Matteo Marsili, ICTP, Trieste, Italy

Antonina Dattolo, University of Udine, Italy

Marija Mitrović Dankulov, Institute of Physics, Serbia

Srđan Škrbić, University of Novi Sad, Serbia

Pere Tumbas, University of Novi Sad, Serbia

Olivera Grljević, University of Novi Sad, Serbia

Petar Marić, University of Banja Luka, BIH

Robert Kopal, University College Algebra, Zagreb, Croatia

Leo Mršič, IN2data, Zagreb, Croatia

Miroslav Bača, University of Zagreb, Croatia

Markus Schatten, University of Zagreb, Croatia

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Igor Bernik, University of Maribor, Slovenia
Tatjana Welzer Družovec, University of Maribor, Slovenia
Marjan Heričko, University of Maribor, Slovenia

We will do our best to squeeze in all talks, but depending on the interest for talks we might ask some of you to present your work as poster instead.

Regardless of whether you are presenting a talk/poster or not, you are required to register in order to attend the conference. Registration is done [here](#), separately from abstract submission.



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IC²S² (<http://iccss2015.eu>)

IC²S² (International Conference on Computational Social Science) is an interdisciplinary event, where scientists of different areas will have the opportunity to meet and discuss about works where social systems and dynamics are investigated in a quantitative way through large datasets, either mined from various sources (e.g. social media, communication systems), or created via controlled experiments

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 e Tecnologie dell'Informazione "A. Faedo",
 CNR, Italy



Munmun de Choudhury, Georgia Institute of
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Sidney Redner, Santa Fe Institute

























Floriana Gargiulo, Université de Namur



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-  Yana Volkovich, Barcelona Media, Spain



SUMMERSOLSTICE 2014
International Conference On
Discrete Models Of Complex Systems

22-25 June 2014, Institute Jozef Stefan, Ljubljana, Slovenia

B O O K
O F
A B S T R A C T S

Edited by

Bosiljka Tadić & Milovan Šuvakov

©Department of Theoretical Physics, Jozef Stefan Institute, Slovenia; June 2014

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Discrete Models of Complex Systems SUMMERSOLSTICE 2014

6th Edition



June 23—25, 2014, Institute Jožef Stefan, Ljubljana, Slovenia

BOOK OF ABSTRACTS

©Department of Theoretical Physics, Jožef Stefan Institute, Ljubljana, June 2014

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Webpage: <http://www-f1.ijs.si/~tadic/Workshops/Solstice14/>

Supported

In part by ARRS Agency for Research of the Republic of Slovenia, the Program P1-0044
and by The Jožef Stefan Institute through the Colloquium program.

ITIS 2014

First announcement and call for papers

The 6th International Conference on Information Technologies and Information Society ITIS 2014,

Šmarješke toplice, Slovenia, November 5-7, 2014

Web: <http://itis2014.fis.unm.si/>

Email: itis14@fis.unm.si

Dear Colleagues,

We invite you to the 6th International Conference on Information Technologies and Information Society (ITIS2014), taking place November 5-7 in Šmarješke toplice, Slovenia.

The conference is annually organized by the Faculty of information studies in Novo mesto (FIS). The venue this year is beautiful Spa-hotel Šmarjeta surrounded by deep forests and green rivers.

The core scientific scope of ITIS events are the applications of IT, particularly in social sciences. The conference also covers a wider range of topics related to IT and computational modeling,

in the context of our Creative Core project "Simulations" and our Research Program "Complex networks".

These include cloud computing, complex networks, bioinformatics, optimization, statistical analysis, business processes, information systems and security.

We welcome contributions in form of papers and/or talks from any of these or related fields.

PLENARY SPEAKERS

- Ivona Brandić, Information Systems Institute, Vienna University of Technology, Austria

"Democratizing Science Through Self-manageable Clouds"

- Franjo Cecelja, Process and Information Systems Engineering Research Centre, University of Surrey, UK

"Ontology engineering: support to industrial processes"

- Boris Podobnik, Department of Physics, Boston University, USA

“Network risk and forecasting power in phase-flipping dynamical networks”

- Damir Vukičević, Department of Mathematics, University of Split, Croatia

(to be announced)

- Aneta Stefanovska (to be confirmed), Department of Physics, Lancaster University, UK

CONTRIBUTIONS

We invite all scientists and researchers in the fields covered by the conference to contribute original scientific papers and/or talks.

Our intention is to publish the best papers (journal versions) with a recognized international publisher.

All contributions are reviewed by our Program Committee on the basis of technical quality, scientific originality and clarity of presentation.

PAPER DEADLINE IS JULY 30

ACCEPTANCE NOTIFICATION ON AUGUST 30

If your paper is accepted, at least one of the authors has to present the paper at the conference.

Talks can be contributed without submitting a paper (only abstract required).

Other details on paper submission are on the webpage.

PROGRAM COMMITTEE

Sanda Martinčić-Ipšić, University of Rijeka, Croatia

Bernard Ženko, Ježef Stefan Institute, Ljubljana, Slovenia

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Boštjan Delak, ITAD, Ljubljana, Slovenia

Marko Bohanec, Jožef Stefan Institute, Slovenia

PROGRAM AND SCHEDULE

The program will include a series of plenary and contributed talks, starting November 6 at 9:00 and ending afternoon/evening of November 7.

It will also include social events such as conference dinner on the evening of November 6 and free gathering on the evening of November 7.

More precise details/schedule will be announced on the webpage once the full list of contributions is known.

IMPORTANT DATES

Paper deadline: July 30

Acceptance notification: August 30

Early registration ends: September 30

Final paper version: November 1

REGISTRATION

Registration consists of two steps: electronic registration and fee payment. If you are contributing a paper and/or a talk, do not forget to submit the details of it.

You can present a talk without submitting a paper, but if you submit a paper, one of the authors must present it via talk.

The fee includes all conference materials, lunch, coffee breaks and welcome drinks. It includes no accommodation.

FEES

Early registration fees (before September 30) are 200 EUR (100 EUR for students)

Late registration fees (after September 30) are 250 EUR (125 EUR for students)

Please cover your fee via bank transfer (details on webpage).

ACCOMMODATION

The conference venue is Spa-hotel Šmarjeta situated in Šmarješke toplice. For booking, please contact the hotel directly:

Phone [+38673843400](tel:+38673843400) [+38673843500](tel:+38673843500)

Email booking.smarjeske@terme-krka.si

Prices (including breakfast, free WIFI, unlimited usage of spa facilities and 10% ITIS2014 discount)

Single room 76EUR

Double room 61EUR (per person)

When unable to find suitable/affordable accommodation in Šmarješke toplice, please contact us.

CONTACT

Email itis14@fis.unm.si

Phone [+38641288778](tel:+38641288778)

Hesitate not to contact us regarding any issues at any time via email above. Please use phone only for urgent matters.

ORGANIZING COMMITTEE

Zoran Levnajič, Biljana Mileva Boškoska, Janez Povh, Matej Mertik

Barbara Pavlakovič, Marjeta Grahek (administrative support)

Maja Zorčič (financial matters)

**5th International Conference on
Information Technologies and
Information Society
ITIS 2013**

Proceedings

Edited by Zoran Levnajić
Faculty of Information Studies in Novo mesto

Dolenjske toplice, Slovenia, 7-9 November 2013
<http://itis2013.fis.unm.si/>

CONFERENCE ORGANIZATION

ORGANIZING COMMITTEE

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Maja Zorčič (financial matters)

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[Home](#)

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[Working groups »](#)

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[Publications](#)

[Private Area »](#)

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Date 2017-03-01 14:38



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Dear Dr Mitrovic Dankulov,

I am pleased to inform you that your proposal has been approved for a Research Topic on Culturomics: Interdisciplinary Path Towards Quantitative Study of Human Culture for Frontiers in Physics, section Interdisciplinary Physics.

Your Research Topic homepage will be created as soon as possible: we are performing a final check of your Topic and we will inform you once it is published online, which may take up to one week. If your Research Topic is being considered to appear simultaneously in multiple Frontiers specialties, we will now follow up with any additional Chief Editors regarding this request.

In the meantime, please take a minute to familiarize yourself with these guidelines on how to host your Research Topic:

http://www.frontiersin.org/Design/pdf/Host_Editor_Guidelines.pdf

Best regards,

With best regards,

Alex Hansen
Specialty Chief Editor, Interdisciplinary Physics
www.frontiersin.org

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Subject Invitation to review a manuscript for Applied Network Science [REDACTED]
From Applied Network Science Editorial Office <em@editorialmanager.com>
Sender <em.apns.0.518f05.9a194dfc@editorialmanager.com>
To Marija Mitrovic <marija.mitrovic@ipb.ac.rs>
Reply-To Applied Network Science Editorial Office <editorial@appliednetsci.com>
Date 2017-03-01 11:19



CC: gaito@di.unimi.it

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Dear Dr Mitrovic,

I would like to invite you to review the manuscript above which has been submitted to Applied Network Science. Further details including the full abstract can be found at the end of this email.

If you are able to review this submission please click on this link:

<http://apns.edmgr.com/l.asp?i=1353&l=AR0B78BH>

If you are not able to review this submission please click on this link:

<http://apns.edmgr.com/l.asp?i=1354&l=3ZMCPHNY>

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In order to keep delays to a minimum, please accept or decline this invitation online as soon as possible. If you are unable to review the manuscript, we would be most grateful if you could suggest alternative reviewers.

Thank you for your time, and I look forward to hearing from you.

Best wishes,
Sabrina Gaito
Applied Network Science
<https://appliednetsci.springeropen.com/>

[REDACTED]



Subject Invitation to review a manuscript for
Computational Social Networks [REDACTED]



From Computational Social Networks Editorial Office
<em@editorialmanager.com>

Sender <em.cson.0.525b87.c3f76f06@editorialmanager.com>

To Marija Mitrović <marija.mitrovic@ipb.ac.rs>

Reply-To Computational Social Networks Editorial Office
<editorial@computationalsocialnetworks.com>

Date 2017-04-06 19:52

[REDACTED]

Dear Dr Mitrović,

I would like to invite you to review the manuscript above which has been submitted to Computational Social Networks. Further details including the full abstract can be found at the end of this email.

If you are able to review this submission please click on this link:

<http://cson.edmgr.com/1.asp?i=1917&l=CNJTOPVA>

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Your username is: Marija Mitrović

Your password is: available at this link http://cson.edmgr.com/Default.aspx?pg=accountFinder.aspx&firstname=Marija&lastname=Mitrovi%c4%87&email_address=marija.mitrovic@ipb.ac.rs

In order to keep delays to a minimum, please accept or decline this invitation online as soon as possible. If you are unable to review the manuscript, we would be most grateful if you could suggest alternative reviewers.

Thank you for your time, and I look forward to hearing from you.

Best wishes,

Chantal Cherifi

Computational Social Networks

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Subject FW: [JSTAT] Editor selects referee for document



From Mitrovic Marija <marija.mitrovic@aalto.fi>

To mitrovic@ipb.ac.rs <mitrovic@ipb.ac.rs>

Date 2015-06-26 17:59

From: JSTAT Editorial Office [jstat-eo@jstat.sissa.it]

Sent: Wednesday, June 24, 2015 8:56 PM

To: Mitrovic Marija

Cc: JSTAT Editorial Office

Subject: [JSTAT] Editor selects referee for document

Authors:

Title:

Dear Dr Marija Mitrovic,

In view of your expertise in this area, I would appreciate it if you could review the submission JSTAT_051P_0615.

The criteria for acceptance of a preprint by JSTAT are high scientific quality, originality and relevance. If you consider this preprint acceptable for publication, please comment on how it meets these criteria.

To keep JSTAT's very high standards your expertise and promptness in responding is essential.

Please connect to the preprint status page:

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Thank you in advance for your help and best regards,

Damien Challet
JSTAT Editor

Subject PLOS ONE Thank You for Reviewing in 2014
From PLOS ONE <plosone@e.plos.org>
To <mitrovic@ipb.ac.rs>
Reply-To PLOS Reviewer <reply-fefe1576776c04-3544_HTML-16122216-7207856-106@e.plos.org>
Date 2015-05-20 00:26



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Marija Mitrovic
PLOS ONE Reviewer (2014)

May 2015

Dear Marija,

On behalf of PLOS and the *PLOS ONE* editorial team, I would like to thank you for participating in the peer review process this past year at *PLOS ONE*. We very much appreciate your valuable input in 2014. We know there are many claims on your time and expertise but with your help, we have continued to publish an influential, lively and highly accessed Open Access journal. Simply put, we could not do it without you and the thousands of other volunteers for *PLOS ONE* and the other PLOS journals who graciously contributed time reviewing manuscripts.

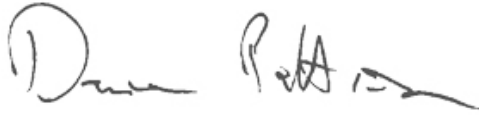
A public “Thank You” to our 2014 reviewers – including you – was published in February 2015.

[\(2015\) PLOS ONE 2014 Reviewer Thank You. PLoS ONE 10\(2\): e0121093. doi:10.1371/journal.pone.0121093](#)

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If you would ever like to provide feedback on our processes, we would very much welcome that. Please send your feedback to us at plosone@plos.org.

With Gratitude,



Damian Pattinson
Editorial Director
PLOS ONE

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Reply-To PLOS ONE <reply-fec015747d630278-8597_HTML-16122216-7207856-38@e.plos.org>
Date 2016-02-25 19:41



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Marija Mitrovic Dankulov
PLOS ONE Reviewer (2015)

February 2016

Dear Marija Mitrovic Dankulov,

On behalf of PLOS and the *PLOS ONE* editorial team, I would like to thank you for participating in the peer review process this past year at *PLOS ONE*.

We know there are many claims on your time and expertise and we very much appreciate your valuable input in 2015. With your help, we have continued to publish an influential, lively and highly accessed Open Access journal. Simply put, we could not do it without you and the thousands of other volunteers for *PLOS ONE* and the other PLOS journals who graciously contributed time reviewing manuscripts.

A public "Thank You" to our 2015 reviewers – including you – was published earlier this week.

[\(2016\) PLOS ONE 2015 Reviewer Thank You. PLoS ONE 11\(2\): e0150341. doi:10.1371/journal.pone.0150341](#)

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If you would ever like to provide feedback on your experience, we would very much welcome that. Please send feedback to plosone@plos.org.

With gratitude,



Iratxe Puebla, Managing Editor
PLOS ONE



Veronique Kiermer, Executive Editor
PLOS

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To Marija Mitrovic <mitrovic@ipb.ac.rs>
Reply-To Quality & Quantity (QUQU)
<mahalakshmi.mariappan@springer.com>
Date 2017-01-31 22:00



Dear Prof. Mitrovic,

In view of your expertise I would be very grateful if you could review the following manuscript which has been submitted to Quality & Quantity.

Manuscript Number: [REDACTED]

Title: [REDACTED]

Abstract: Human dynamics and sociophysics suggest statistical models that may explain and provide us with a better understanding of social phenomena. Here we propose a generative multiplicative decrease model that gives rise to a rank-order distribution and allows us to analyse the results of the last three UK parliamentary elections. We provide empirical evidence that the additive Weibull distribution, which can be generated from our model, is a close fit to the electoral data, offering a novel interpretation of the recent election results.

In case you accept to review this submission please click on this link:

<http://ququ.edmgr.com/l.asp?i=14997&l=QGDX305>

If you do not have time to do this, or do not feel qualified, please click on this link:

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We hope you are willing to review the manuscript. If so, would you be so kind as to return your review to us within 28 days of agreeing to review? Thank you.

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Your password is: available at this link http://ququ.edmgr.com/Default.aspx?pg=accountFinder.aspx&firstname=Marija&lastname=Mitrovic&email_address=mitrovic@ipb.ac.rs

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If you have any questions, please do not hesitate to contact us. We appreciate your assistance.

With kind regards,
Vittorio Capecchi

Subject SREP-16-33937 Review Instructions for Scientific Reports

From <scientificreports@nature.com>

To <mitrovic@ipb.ac.rs>

Date 2016-08-26 20:18



Dear Dr Mitrovic Dankulov,

Thank you for agreeing to review the manuscript [REDACTED]

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The contents of the manuscript are, of course, confidential until published.

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