



ATLAS NOTE

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Event selection for the search of the Higgs boson in the $H \rightarrow WW^{(*)} \rightarrow \ell \nu \ell \nu$ decay mode using 4.7 fb^{-1} of data collected with the ATLAS detector at $\sqrt{s} = 7 \text{ TeV}$

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Abstract

A search for a Higgs boson has been performed in the $H \rightarrow WW^{(*)} \rightarrow \ell^+ \nu \ell^- \bar{\nu}$ channel with an integrated luminosity of 4.7 fb^{-1} of pp collisions at $\sqrt{s} = 7 \text{ TeV}$ collected with the ATLAS detector at the Large Hadron Collider. This note describes the nominal selection for the Higgs boson mass in the range $110 \text{ GeV} < m_H < 600 \text{ GeV}$.