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The production of two leptons and missing energy from $H \rightarrow Sh$ production at the LHC

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Data reported by the ATLAS and CMS experiments at the Large Hadron Collider (LHC) involving final states with two charged leptons (electrons or muons) and missing energy is studied. These data are analysed in terms of the production of a heavy boson, H , decaying into the Higgs boson, h , and an additional scalar mediator, S . The mass of H is assumed to be around 270 GeV and the mass of S lies in the range $m_h < m_S < m_t$, where m_h and m_t correspond to the masses of the Higgs boson and the top quark. Two models are used to describe the decay of S into charged leptons and missing energy.

Apply to be considered for a student award (Yes / No)?

Yes

Level for award (Hons, MSc, PhD, N/A)?

MSc

Main supervisor (name and email) and his / her institution

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Would you like to submit a short paper for the Conference Proceedings (Yes / No)?

Yes

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