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## Search for boosted heavy neutrino with the ATLAS detector at the LHC

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The search for the discovery potential at the LHC of a high-mass right handed (RH) gauge boson  $W_R$  which decays to a heavy neutrino and a lepton. The neutrinos that are produced are highly boosted and subsequently decay via off-shell  $W_R$  boson to jets and a lepton ( $N \rightarrow ljj$ ). The decay products are highly collimated, forming a single neutrino jet. The focus is on the regime where the  $W_R$  is very heavy compared to the heavy Majorana neutrino  $N$ . In ATLAS, a large radius jet with an electron inside has never been looked at. The performance study will be shown

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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