

Searches for Heavy Neutral Leptons in the ATLAS Experiment

Friday, 8 November 2024 14:10 (20 minutes)

Heavy Neutral Leptons (HNLs) are theoretical particles predicted by Beyond the Standard Model (BSM) physics, often introduced to explain phenomena such as neutrino masses and the matter-antimatter asymmetry in the universe. HNLs, particularly those of the Majorana type, can induce lepton number violating processes, making them a subject of great interest. This talk presents the HNL searches conducted within the ATLAS experiment, focusing specifically on the search for HNLs produced in the context of the process $t\bar{t} \rightarrow \ell\bar{\ell}$ in the t-channel.

Primary author: CHOW, Edwin

Presenter: CHOW, Edwin

Session Classification: Parallel Sessions (II)