

## Natural SUSY on Trial: Status of Higgsino Searches with the ATLAS Detector

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Natural supersymmetry has earned a unique focus in LHC search efforts, in part due to its solution to the hierarchy problem. Minimizing fine tuning in this solution leads to light Higgs superpartners, known as higgsinos, with many predictions of their masses well within LHC reach. In order to also provide a valid dark matter candidate, the lightest three higgsinos are expected to have small mass splittings between them. While this “compressed” mass spectrum is well-motivated, such scenarios produce very little missing energy and thus are experimentally challenging. Here, these challenges and the idea of naturalness are used as a lens to interpret the first higgsino sensitivity with ATLAS and discuss future search prospects.

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