

Constraining sparticles at the LHC in a supersymmetric seesaw scenario

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We study a scenario inspired by natural supersymmetry, where neutrino data is explained within a low-scale seesaw scenario. We extend the MSSM by adding light right-handed neutrinos and their superpartners, the R-sneutrinos, and consider the lightest neutralinos to be higgsino-like.

We consider the possibility of having an R-sneutrino as lightest supersymmetric particle. Assuming that some squarks and gauginos are heavy, we systematically evaluate the bounds on slepton and squark masses due to existing LHC data.

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