

The logo for DPF-PHENO 2024 features the text "DPF-PHENO 2024" in a bold, sans-serif font. The text is white and set against a blue background that has a subtle, wavy pattern, resembling a sky or water surface.

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Searching for top squarks from the string landscape at HL-LHC

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Supersymmetric models with low electroweak fine-tuning are more prevalent on the string landscape than fine-tuned models. We assume a fertile patch of landscape vacua containing the minimal supersymmetric standard model (MSSM) as a low-energy EFT. Such models are characterized by light higgsinos in the mass range of a few hundred GeV whilst top squarks are in the 1-2.5 TeV range. Other sparticles are generally beyond current LHC reach. We evaluate prospects for top squark searches of the expected natural SUSY at HL-LHC.

Mini Symposia (Invited Talks Only)

Authors: SENGUPTA, Dibyashree (INFN, Frascati); Prof. BAER, Howard (University of Oklahoma); DUTTA, Juhi; ZHANG, Kairui (University of Wisconsin, Madison); Prof. BARGER, Vernon (University of Wisconsin, Madison)

Presenter: DUTTA, Juhi

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