

The Forgotten Supersymmetry Signals: Long-Lived SUSY particles inside LHC

Supersymmetric signals have been widely searched for at the LHC, but unfortunately there are no obvious signals beyond the standard model have been found. Does the natural supersymmetry actually exist or not at the TeV scale, or did the experimentalists forget some important signals at the LHC? In this talk, I will introduce some of our previous works that focus on the long-lived SUSY particles searches at the LHC, especially the recent publication focusing on the NLSP searches, the gravitino or axino searches, and show how the final discovery/exclusion bounds are much highly optimized.

Primary authors: LI, Jinmian (四川大学); LI, Tianjun (Institute of Theoretical Physics, Chinese Academy of Sciences); 张, 文星 (Hebei University); PEI, Junle

Presenter: 张, 文星 (Hebei University)