Fundamental physics in the cosmos: The early, the large and the dark Universe



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Higgsino Dark Matter at Collider

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The Higgsino is the most promising candidate for the dark matter.

The almost pure Higgsino, however, is known to be a very challenging target at the LHC.

I will show that improvement of tracking technique of disappearing tracks can significantly increase the sensitivity for the Higgsino.

I will also discuss a future 33 TeV collider can probe the 1 TeV Higgsino, which is the most interesting for the thermal relic density.

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