Contribution ID: **37** Type: **Reinterpretation and LLP workshops joint session**

Recasting the scotogenic FIMP

Wednesday 16 May 2018 17:00 (15 minutes)

Taking the scotogenic FIMP model as an example I discuss LHC signatures which arise in models with dark matter freeze-in. The small couplings required to reproduce the observed dark matter abundance translate into decay-lengths for the next-to-lightest dark sector particle which can be macroscopic, potentially leading to spectacular signatures at the LHC. I present the leading experimental signatures of the model and discuss how we can obtain limits by recasting LHC searches for long-lived particles.

Presentation

Talk given in person

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Session Classification: Joint session with Long-Lived Particles Workshop