

Phenomenology 2021 Symposium



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Exploring the Co-SIMP Dark Sector

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A particularly salient aspect of particle dark matter models is the connection between thermal interactions and cosmological abundance. Extending from the famous WIMP paradigm is a rich sector of dark sector models with different number changing mechanisms, all of which realize a relic abundance via interactions with the Standard Model or itself. In this talk I will introduce one of these scenarios: Co-SIMP dark matter, whose key interactions involve both cannibalistic interactions and couplings to the Standard Model. I will discuss the phenomenology and UV completions of this scenario, as well as constraints and prospects for detection.

Summary

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