

Simplified models of dark matter

Last couple of years marked a shift in the paradigm of dark matter searches at colliders. While most of the results of earlier searches have been presented in terms of limits on effective field theory operators, the limitations of this approach have been realized and the results of new searches are now mostly being interpreted in terms of simplified models of dark matter. Not only these models allow for a more realistic comparison between collider and direct or indirect detection experiments, but they also can be used to put constraints on dark matter models from seemingly unrelated searches, e.g., a search for dijet resonances. I'll review the current status of simplified dark matter models and also talk about new ideas on expanding the existing set of models to allow for a broader interpretation of existing searches and design better strategies for future ones.

I intend to submit my contribution for the proceedings

Yes

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