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Beyond the simplest strongly interacting dark matter

Monday 25 August 2025 15:20 (20 minutes)

This talk focuses on the popular framework of strongly interacting massive particle (SIMP), where dark pion serves as the dark matter candidate. While it is well known that for SIMP the freeze-out process is typically 3DM ->2DM via DM self-interactions, I will show that the existence of other low-hanging composite states, such as sigma-like and rho-like dark mesons, can dramatically change the phenomenology and/or address other issues of the SIMP framework.

Collaboration you are representing

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