

Dark Matter In and Out of Equilibrium

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One generic scenario for the dark matter of our universe is that it resides in a hidden sector: it talks to other dark fields more strongly than it talks to the Standard Model. I'll discuss some simple, WIMP-y models of this kind of hidden sector dark matter, paying particular attention to what we can learn from the cosmic history of the dark sector. In particular, the need to populate the dark sector in the early universe can control the observability of dark matter today. Some results of interest include new cosmological lower bounds on direct detection cross-sections and simple models of dark matter with parametrically novel behavior.

Preferred Session

Dark Matter

Comments

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