

DM model buildings along the SM construction

Tuesday 15 April 2025 09:30 (30 minutes)

The SM for particle physics is surprisingly successful. It is based on symmetry principles of various types. I will first recapitulate basic assumptions and key aspects of the SM, emphasizing differences between global vs. local gauge symmetries. Then I will apply similar assumptions and aspects to the DM model buildings. I will discuss a few exemplary DM models and demonstrate theoretical/phenomenological importances of my approach, in particular unitarity and theoretical consistency.

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