

Séminaire de physique des particules et de cosmologie

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Mardi 12/03/2019, 16h00-17h00

Orme des Merisiers Salle Claude Itzykson, Bât. 774

Exceptionally Light Thermal Dark Matter

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SLAC

I will start by briefly discussing why thermal relics are among the most appealing candidates for dark matter. In this context I will introduce new regimes of thermal freeze-out that were discovered in the last few years. They naturally occur in a variety of models, including simple WIMP realizations of thermal relic dark matter, and point to a different parameter space compared to what is usually considered, with masses that can be as small as a few keV. I will also briefly discuss new ideas for the direct detection of dark matter in this light parameter space.

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