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LPENS Particle physics phenomenology and cosmology

Mardi 13 Fevrier 2024, 14 :00
LPENS, E239 - LPENS - 24 rue Lhomond 75005 PARIS
Domaines : hep-ph

Titre : *Unusual searches for Feebly Interacting Particles from Supernovae*

Orateur : **Pierluca Carenza (The Oskar Klein Centre, Stockholm University)**

Résumé : *In this talk I will introduce the reasons why Supernovae (SNe) are excellent factories of Feebly Interacting Particles (FIPs), with particular attention to their effects on the SN dynamics. Constraints on FIPs from observations of SN neutrinos will be presented. In addition, indirect observational consequences of FIPs produced in SNe will be discussed. From this perspective, some new (and unusual) strong constraints on FIP properties can be obtained.*