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Particle Physics at LPTHE

Vendredi 22 Décembre 2017, 14 :00
LPTHE, Library
Domaines : hep-ph

Titre : *Search for energetic neutrinos from the Sun - Dark Matter or Solar Atmospheric Neutrinos ?*

Orateur : **Carsten Rott (Sungkyunkwan University, Korea)**

Résumé : *High-energy neutrinos are expected to be produced in cosmic-ray interactions with the solar atmosphere. The resulting neutrino flux is expected to offer insights into cosmic ray transport in the inner solar system and on solar magnetic fields. Besides the high theoretical interest in solar atmospheric neutrinos, an observed signal could be the first high-energy neutrino point source and valuable for calibration. Preliminary selection criteria and optimization studies will be discussed. We present sensitivities and the prospects to observe the solar atmospheric neutrino signal with IceCube data. The interplay with on-going dark matter searches from the Sun will be discussed.*
