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Particle Physics at LPTHE

Vendredi 13 Octobre 2023, 14 :00
LPTHE, LPTHE library, towers 13-14, 4th floor
Domaines : hep-ph

Titre : *Baryogenesis from Higgs inflation and the Schwinger effect*

Orateur : **Yann Cado (LPTHE)**

Résumé : *If the Higgs field is nonminimally coupled to gravity, it can generate cosmological inflation. We will show that if the Higgs doublet is also coupled to the hypercharge Chern-Simons density, there is a window in the parameter space for electroweak baryogenesis consistent with all experimental observations. In this setup, the backreaction of fermions on the plasma can be taken into account analytically. There are other slow-roll inflation models where this is not possible, hence we will also present a numerical approach to consider this effect.*