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Particle Physics at LPTHE

Mardi 21 Novembre 2023, 14 :00
LPTHE, LPTHE library, towers 13-14, 4th floor
Domaines : hep-ph

Titre : *Searches for new electroweak particles at the LHC*

Orateur : **Junichiro Kawamura (IBS-CTPU, Korea)**

Résumé : *In this talk, I will discuss current limits on two types of new electroweak particles, namely vector-like (VL) leptons and higgsinos. For the VL leptons, I assume that it mixes only with a muon, mainly motivated by the g-2 anomaly, and show the current limits on it by recasting the existing searches. I will also discuss signals involving a non-SM Higgs and a muonphilic Z' boson. For the higgsino, I argue that the mono-Z/W boson signal can probe it more efficiently than the conventional monojet search. This result might imply the importance of the mono-Z/W channels for other DM candidates.*