

Contribution ID: 866 Type: Parallel Talk

Muon g-2 and dark matter in models with vector-like fermions

Friday 7 July 2017 18:00 (15 minutes)

We analyze the phenomenological status of several models of BSM physics explaining the muon g-2 anomaly and the relic density of dark matter. We consider scenarios requiring extra vector-like matter, some of which are based on supersymmetry. We confront the models with the latest bounds from the LHC 14 TeV run, direct and indirect searches for dark matter, and precision tests of the electroweak theory, highlighting viable regions of the parameter space and expected signatures in future experiments.

Experimental Collaboration

Primary author: SESSOLO, Enrico Maria (NCBJ, Warsaw)

Co-authors: KOWALSKA, Kamila (TU Dortmund); DARMÉ, Luc (UPMC Paris 6); Dr CHOUDHURY, Arghya (University of Sheffield); TROJANOWSKI, Sebastian (National Centre for Nuclear Research, Poland); ROSZKOWSKI,

Leszek

Presenter: SESSOLO, Enrico Maria (NCBJ, Warsaw) **Session Classification:** Higgs and new physics

Track Classification: Higgs and New Physics