

Chirally enhanced contributions to muon $g-2$ and related observables

mercredi 1 juin 2022 14:00 (20 minutes)

Among the simplest new physics explanations of the muon $g-2$ anomaly are scenarios with chirally enhanced contributions. The new particles can be very heavy, even beyond the reach of future colliders, and thus the confirmation of such explanations might rely only on indirect evidence. I will discuss that these models generically predict correlations with related signatures that include possible modifications of muon couplings to Z and W bosons, correlations with the deviation of $h \rightarrow \mu\mu$ from the SM prediction and muon EDM, or large rates for di-Higgs and tri-Higgs signals at a muon collider. In specific models some of these correlations are parameter free, presenting unique signals that can be tested without directly producing new particles.

Orateur: DERMISEK, Radovan (Indiana University)

Classification de Session: Parallel session 3