Lattice 2024



Contribution ID: 488 Type: Talk

On the spectrum of observable particles in BSM-like theories

Friday, 2 August 2024 15:55 (20 minutes)

Analytical investigations and lattice simulations have previously suggested that the spectrum of observable particles in "BSM-like" theories may differ from that expected naively from perturbation theory. We consider a GUT-like toy theory, which already showed such qualitative discrepancies in exploratory lattice simulations, and perform a detailed quantitative investigation of its physical spectrum, covering different channels and lines of constant physics. We find indeed a substantial different spectrum than the elementary one. In particular, stable states with quantum numbers different from the elementary ones are observed.

Primary author: DOBSON, Elizabeth (University of Graz)

Presenter: DOBSON, Elizabeth (University of Graz)

Session Classification: Particle physics beyond the Standard Model

Track Classification: Particle Physics Beyond the Standard Model