

Contribution ID: 268 Type: Talk

Chiral fermions on the lattice: Recent developments

The Standard Model has long resisted a fully nonperturbative definition, primarily because of the challenges in formulating chiral gauge theories on the lattice. Recent progress has revived activity in this area, driven by a deeper understanding of bulk–boundary correspondences linking anomalies and topological phases. At the same time, the potential to bypass the intrinsic sign problem of chiral gauge theories using quantum computers has made Hamiltonian formulations increasingly compelling. In this talk, I will discuss recent constructions of fermions preserving exact chiral symmetry, along with new proposals for realizing lattice chiral gauge theories.

Parallel Session (for talks only)

Plenary talk

Author: SINGH, Hersh (Fermilab)

Presenter: SINGH, Hersh (Fermilab)

Session Classification: Plenary session