

Representation of Fermions in the Pati-Salam model

We suggest a representation of fermions for Pati-Salam model. Pati-Salam model can be derived from square root Lorentz manifold with the self-parallel transportation principle. The sheaf quantization, path integral quantization and canonical quantization were given. The semi-leptonic and beyond standard model flavor changing neutral currents (FCNCs) of the Lagrangian in this representation of fermions are discussed. A pair of possible Cabibbo-Kobayashi-Maskawa (CKM) and Pontecorvo-Maki-Nakagawa-Sakata (PMNS) matrices are defined. An effective Lagrangian for this model is given.

Presenter: LI, Desheng (HNIE)

Session Classification: Session 15