Contribution ID: **6** Type: **Talk**

Borici-Creutz fermions on 2-dim lattice

Tuesday, July 26, 2016 5:10 PM (20 minutes)

Minimally doubled fermions(MDF) having only two species could be
promising formalism to study chiral fermion on a lattice. The action being ultra-local, one expects that the MDF formulations might provide computationally cheaper
alternatives to the existing lattice chiral formulations. Borici-Creutz fermion is one such
minimally doubled fermion formulation. In this work, we explore the Borici-Creutz fermion
formulation in simple a 2d Gross-Neveu model and in QED2 with Hybrid Monte Carlo simulation. We study chiral symmetry breaking and mass spectrum in Gross-Neveu model .

Primary author: Mr GOSWAMI, Jishnu (IIT Kanpur)

Co-authors: Dr CHAKRABARTI, Dipankar (IIT Kanpur); Dr BASAK, Subhasish (NISER Bhubaneswar)

Presenter: Mr GOSWAMI, Jishnu (IIT Kanpur)

Session Classification: Theoretical Developments

Track Classification: Theoretical Developments