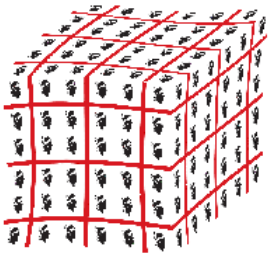

Contribution ID: **21** Type: **not specified**

Classification and Generalization of Minimal-doubling actions

Friday, 18 June 2010 15:50 (20 minutes)

There is a chance that Minimal-doubling fermion actions will remove a numerical expense in Lattice QCD simulations although all the known examples so far lack sufficient discrete symmetries for a good continuum limit. In this talk we discuss classification and unification of Minimal-doubling actions to search for possibiliy of their application. In this context we propose a new class of Minimal-doubling actions, which might possess higher discrete symmetry than Karsten-Wilczek or Borici-Creutz actions.
We also study generalization of Minimal-doubling actions to higher dimensions. We show that the parameter range within which the number of doublers becomes minimal gets narrower with the dimension going up.

Please, insert your presentation type (talk, poster)

talk

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