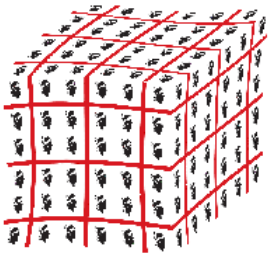

Contribution ID: **196** Type: **not specified**

Simulations with dynamical HISQ quarks

Thursday, 17 June 2010 17:00 (20 minutes)

We study the lattice spacing dependence of physical quantities in simulations with the HISQ quark action, with four flavors of dynamical quarks. This study uses runs at several lattice spacings, but with the light quark mass held fixed at two tenths of the strange quark mass. We find that the lattice
artifacts in the HISQ simulations are much smaller than those in the asqtad simulations at the same lattice spacings and quark masses. We also discuss methods for setting the scale, or assigning a lattice spacing to ensembles run at unphysical parameters.
Finally, we discuss plans for further generation of four-flavor lattices using the HISQ action.

Please, insert your presentation type (talk, poster)

talk

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