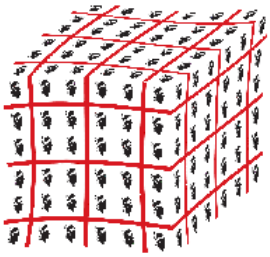

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Coherent center domains in local Polyakov loops

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

Coherent center domains in local Polyakov loops

We analyze properties of local Polyakov loops using quenched as well as dynamical SU(3) gauge configurations for a wide range of temperatures. It is demonstrated that for both, the confined and the deconfined phases, the local Polyakov loop prefers phase values near the center elements $1, e^{pm2\pi/3}$. We divide the sites of the lattice into three sectors according to these phases and show that the sectors give rise to the formation of clusters. For a suitable definition of these clusters we find that the deconfinement transition manifests itself as the onset of percolation of the clusters.

Please, insert your presentation type (talk, poster)

talk

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