

Topology (and axions) in QCD

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The talk reviews a current status of topological studies on the lattice.

We outline the specific challenges posed by lattice topology, the different proposals for handling them, the observable effects of topology on the QCD spectrum and its interrelation with chiral and axial symmetries. We review the transition to the Quark Gluon Plasma, the fate of topology at the transition, and the approach to the high temperature limit. We discuss the extrapolations needed to reach the regime of cosmological relevance, and the resulting constraints on the QCD axion.