Workshop for young scientists with research interests focused on physics at FAIR



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Polyakov Loop Susceptibilities in Pure Gauge System

Friday, 20 September 2013 12:00 (30 minutes)

We shall present the new lattice data on Polyakov loop susceptibilities in SU(3) pure gauge system. Like the Polyakov loops, the susceptibilities can serve as the order parameter for the spontaneous Z(3) center symmetry breaking. In the context of Polyakov loop effective models, these susceptibilities are related to the curvatures of the potential. We shall discuss how the new data can be employed to constrain various Polyakov loop models. We shall also discuss the determination of critical end point for deconfinement phase transition in the heavy quark regime.

Primary author: Dr LO, Pok Man (GSI)Presenter: Dr LO, Pok Man (GSI)Session Classification: Talks and Discussions