The 33rd International Symposium on Lattice Field Theory (Lattice 2015)



Contribution ID: 355

Type: Talk

Fluctuations of conserved charges at finite temperature and density

Saturday, 18 July 2015 13:45 (30 minutes)

Fluctuations of conserved charges in a grand canonical ensemble can be calculated as derivatives of the free energy with respect to the respective chemical potential. They are directly related to experimentally available observables that describe the hadronization in heavy ion collisions. The same derivatives can be used to extrapolate zero density results to finite chemical potential. We review the recent lattice calculations in the staggered formalism and discuss its implications to phenomenology and resummed perturbation theory.

Primary author: Dr BORSANYI, Szabolcs (University of Wuppertal)Presenter: Dr BORSANYI, Szabolcs (University of Wuppertal)Session Classification: Plenary Session

Track Classification: Nonzero Temperature and Density