



Contribution ID: 148

Type: Talk

Resummed lattice QCD equation of state at finite baryon density: strangeness neutrality and beyond

Wednesday 15 June 2022 09:20 (20 minutes)

In this talk we present a resummation of the QCD equation of state from lattice simulations at imaginary chemical potentials. We utilize a generalization of the scheme introduced in 2102.06660, moving to the case of non-zero strangeness chemical potential. We present continuum extrapolated results for thermodynamic observables in the temperature range $130 \text{ MeV} \leq T \leq 280 \text{ MeV}$, for chemical potentials up to $\mu_B/T = 3.5$, along the strangeness neutral line. We also extrapolate beyond strangeness neutrality to small values of the strangeness-to-baryon-number ratio $R = n_S/n_B$.

Present via

Online

Primary authors: PASZTOR, Attila (Eötvös University); GUENTHER, Jana N. (University of Wuppertal); PAROTTO, Paolo; RATTI, Claudia; SZABO, Kalman (Forschungszentrum Jülich GmbH); KARA, Ruben; BORSANYI, Szabolcs Istvan; FODOR, Zoltan

Presenter: PAROTTO, Paolo

Session Classification: PA-Bulk matter phenomena, QCD phase diagram, and Critical point

Track Classification: Bulk matter phenomena, QCD phase diagram, and Critical point