Contribution ID: **45** Type: **Poster**

Energy density and pressure of strong-coupling lattice QCD

Monday, 21 May 2018 18:30 (0 minutes)

The color-singlet representation of lattice QCD with staggered fermions offers a framework to soften the sign problem at finite density. This allows for the computation of the complete QCD phase diagram at strong coupling as well as at $\mathcal{O}(\beta)$. Furthermore, the chiral limit is cheap and thermodynamic quantities such as the energy density and the pressure can be computed easily. Using recently obtained results on the nonperturbatively renormalised anisotropy $\xi(\gamma)$, we present first calculations of the energy density and pressure in the μ-T-plane in the strong coupling limit.

Primary author: Mr BOLLWEG, Dennis (Bielefeld University)

Co-author: Dr UNGER, Wolfgang (Bielefeld University)

Presenter: Mr BOLLWEG, Dennis (Bielefeld University)

Session Classification: Poster Session