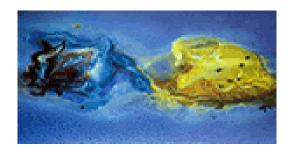Contribution ID: **108**   Type: **Talk**

Equation of state in 2 + 1 flavor QCD at high temperatures

Wednesday 1 August 2018 14:30 (30 minutes)

We calculate the equation of state at high temperatures in 2+1 flavor QCD using the highly improved staggered quark (HISQ) action. We study the lattice spacing dependence of the pressure at high temperatures using lattices with temporal extent $N_\tau = 6,\ 8,\ 10$ and 12 and perform continuum extrapolations.
We also give a continuum estimate for the equation of state up to temperatures $T = 2$ GeV, which are then compared with results of the weak-coupling calculations. We find a reasonably good agreement with the weak-coupling calculations at the highest temperatures.

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Session Classification: Deconfinement

Track Classification: D: Deconfinement