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The QCD Equation of State

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The HotQCD Collaboration has calculated the equation of state in 2+1 flavor QCD at zero net baryon density using the Highly Improved Staggered Quark (HISQ) action. The
strange quark mass was set to its physical value and the light (up/down)
quark masses used correspond to a pion mass of 160 MeV in the continuum
limit. Lattices with temporal extent Nt=6, 8, 10 and 12 were used, and the cutoff effects for Nt>6 were observed to be quite small. For temperatures
in the range 130 MeV < T < 400 MeV continuum extrapolations were performed. We will discuss errors and compare our results with others in the literature.

Summary

We present recent results on the QCD Equation of State calculated with the HISQ action by the HotQCD Collaboration.

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