

Recent progress in Lattice QCD thermodynamics

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I review some of the most important recent results from finite temperature lattice QCD based on the contributions of the Budapest-Wuppertal collaboration. In particular I'll cover the equation of state [1], the role of the charm quark, and the fluctuation observables also measured in heavy ion physics [2]. I will comment on the the reliability of the hadron resonance gas model for low temperatures and the hard thermal loop approximation at high temperatures [3].

References

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- [2] S. Borsanyi, Z. Fodor, S. D. Katz, S. Krieg, C. Ratti and K. K. Szabo, arXiv:1403.4576 [hep-lat].
- [3] N. Haque, A. Bandyopadhyay, J. O. Andersen, M. G. Mustafa, M. Strickland and N. Su, JHEP **1405** (2014) 027 [arXiv:1402.6907 [hep-ph]].

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