Strangeness at finite temperature

Using generalized quark number susceptibilities we obtain continuum extrapolated

lattice QCD results for the free energy in various strangeness sectors and compare it with the expectations from the

hadron resonance gas model. We use these findings to disambiguate between various spectrum tables. Thus we constrain

the abundance of strange mesons and baryons using finite temperature data. This allows to investigate whether the

measured hadronic spectrum is missing some additional strange states, predicted by the Quark Model but not yet

detected. The implication of our results on the chemical freeze-out parameters is discussed.

Preferred Track

QCD at High Temperature

Collaboration

Not applicable

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