Contribution ID: **390** Type: **Poster**

Quarkonium properties at T>0 from lattice NRQCD

Tuesday, 15 May 2018 19:10 (30 minutes)

I will present results on the T>0 charmonium and bottomonium spectral functions, based on high statistics lattice NRQCD calculations of the corresponding correlators performed in 2016-2018 (full statistics for $48^3 \times 12$ lattices and new results on $64^3 \times 16$ lattice).

We extract the quarkonium in-medium spectral functions based on two complementary strategies: 1. A direct Bayesian reconstruction via a novel variant of the BR method. This remedies the ringing problem inherent in the previous analysis. 2. Correlator model fits with adapted frequency binning, which incorporate the combined insight from potential based computations and the T=0 spectral functions.

We find that the quarkonium masses are shifted to smaller values with increasing temperatures and also provide upper limits on the thermal width. We compare the temperature dependence of the correlation functions obtained in lattice NRQCD with the potential model.

Content type

Theory

Collaboration

Centralised submission by Collaboration

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