

Bottomonium suppression from the 3-loop QCD potential

Monday, January 15, 2024 11:40 AM (30 minutes)

We present results for bottomonium suppression in the QGP based on pNRQCD and the open quantum system framework. We solve the corresponding Lindblad equation for the quarkonium density matrix to obtain results for the nuclear modification factor. We extend previous studies by including the three-loop potential from pNRQCD for the singlet and octet into the simulation pipeline. We find good agreement with the experimental data by using values for the transport coefficients that we extract from lattice measurements of the in medium width and thermal mass shift.

Presenter: MAGORSCH, Tom