Contribution ID: **575**   Type: **Poster**

Quarkonia Spectral Function at Finite Momenta

Heavy quark-antiquark bound states such as $c\bar{c}$ and $b\bar{b}$, serve as essential tools for probing the properties of quark-gluon plasma (QGP). However, its finite momentum behaviour remains largely unexplored, despite its experimental significance. Here, we present a finite-momentum lattice QCD study of quakonia dynamics by observing its finite-momentum spectral function. We obtained the spectral function in threshold region by solving the Schrödinger equation with finite-momentum perturbative potential. We will model this spectral function with perturbative vacuum part to describe the lattice correlators in 2+1 flavor QCD at temperatures of 1.20 T_c, 1.40 T_c, and 1.62 T_c for pseudoscalar channel.

Category

Theory

Collaboration (if applicable)

HotQCD Collaboration

Authors: BALA, Dibyendu (Bielefeld University); KACZMAREK, Olaf; PAVAN, Pavan

Presenter: PAVAN, Pavan

Session Classification: Poster session 2

Track Classification: Heavy flavor & quarkonia