

Holographic Picture for Heavy Vector Meson Dissociation in a Plasma

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It is important to understand the properties of heavy vector mesons inside a thermal medium. One of the reasons is that the fraction of such particles detected after a heavy ion collision can provide information about the formation of a plasma state.

An interesting framework for estimating the degree of dissociation of heavy mesons in a plasma is the holographic approach.

We will discuss some recent results showing that a consistent picture for the thermal behavior of charmonium and bottomonium states in a thermal medium emerges from holographic bottom up models.

A crucial ingredient in this approach is the appropriate description of decay constants, since they are related to the heights of the quasiparticle peaks of the finite temperature spectral function.

Considering a medium with finite temperature and density, the thermal spectra of $c\bar{c}$ and $b\bar{b}$ S wave states are obtained. A very recent result for a medium with magnetic eB field is also considered.

Primary author(s) : Prof. BRAGA, Nelson (Universidade Federal do Rio de Janeiro)

Co-author(s) : Dr FERREIRA, Luiz F (Universidade Federal do Rio de Janeiro)

Presenter(s) : Prof. BRAGA, Nelson (Universidade Federal do Rio de Janeiro)

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