Quark Matter 2015 - XXV International Conference on Ultrarelativistic Nucleus-Nucleus Collisions



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Quenching and Broadening of Holographic "Jets"

Tuesday, 29 September 2015 16:30 (2 hours)

I will describe the results of an exploration currently in progress of how to use holographic calculations of an ensemble of energetic light quarks to describe the energy loss and broadening in angle of jets in heavy ion collisions. We construct an ensemble of energetic light quarks in calN = 4 SYM theory, with a distribution of the "jet" angular extent for a given "jet" energy based upon what is known about real jets in pp collisions. We then see how this distribution changes after the "jets" propagate through a slab of strongly coupled plasma, which degrades their energies and expands their angular extent.

On behalf of collaboration:

NONE

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