Strangeness in Quark Matter



Contribution ID: 5 Type: Talk

Effect of quark gluon plasma on charm quark produced in relativistic heavy ion collision

Tuesday 23 July 2013 15:20 (20 minutes)

Charm quarks are produced mainly in the pre-equilibrium stage of heavy ion collision and serve as excellent probes entering the thermalized medium medium. They come out with altogether different momentum and energies and fragments into D mesons and later decay into non-photonic electron which are experimentally observed. Here we present effects of Quark Gluon Plasma on charm quark production using two different models, one of which is the calculations based on Wang-Huang-Sarcevic model of multiple collisions and other using the calculations of Parton Cascade Model based on Microscopic Boltzmann Transport Equation.

Summary

The results from the model studies are compared with experimental data available at RHIC and LHC. The results are also compared with theoretical models from other literatures.

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Session Classification: Low Energy / Heavy Flavour