Contribution ID: **157** Type: **Oral presentation**

Toward a solution of the RAA and v2 puzzle for heavy quarks.

Thursday, 25 June 2015 15:20 (20 minutes)

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One of the primary aims of the ongoing nuclear collisions
at Relativistic Heavy Ion Collider (RHIC) and Large Hadron
Collider (LHC) energies is to create a Quark Gluon Plasma (QGP).
The heavy quarks, charm and bottom constitutes a unique probe of the QGP properties.
Both at RHIC and LHC energies a puzzling relation between the nuclear modification factor
RAA(pT) and the elliptic flow v2(pT) related to heavy quark has been observed which challenged all the existing models.
We discuss how the temperature dependence of the heavy quark
drag coefficient is responsible to address for a large part of such a puzzle. In particular, we have considered four different models to
evaluate the temperature dependence of drag and diffusion coefficients propagating through a quark
gluon plasma (QGP). All the four different models are set to reproduce the same
RAA(pT) observed in experiments at RHIC and LHC energy. We point out that for the same RAA(pT) one can generate
2-3 times more v2 depending on the temperature dependence of the heavy quark drag coefficient.
An increasing drag coefficient as Tc is a major ingredient for a simultaneous description of RAA(pT) and v2(pT).

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Session Classification: Relativistic Heavy-Ion Collisions

Track Classification: Relativistic Heavy-Ion Collisions