

# **J/ $\psi$ azimuthal anisotropy in Au+Au collisions at 200 GeV**

*Tuesday, 19 May 2015 14:40 (20 minutes)*

In relativistic heavy-ion collisions, J/ $\psi$  can be produced via different mechanisms and the large mass of the charm quark makes it a valuable probe to the thermalization of the medium. The study of J/ $\psi$  azimuthal anisotropy can allow for the disentangling of a few interesting dynamic processes, e.g., J/ $\psi$  produced from direct pQCD processes, and J/ $\psi$  produced from recombination of charm quarks within the medium. J/ $\psi$  produced from direct pQCD processes have little azimuthal anisotropy due to the lack of collectivity and initial emitting azimuthal preference, while J/ $\psi$  produced from recombination of charm quarks are expected to inherit considerable azimuthal anisotropy if charm quarks have finite elliptic flow.

In this talk, we will present J/ $\psi$  azimuthal anisotropy in Au+Au collisions at 200 GeV, from data taken by STAR during RHIC operation in year 2010 and 2011. The result will be presented as a function of centrality of Au+Au collisions and J/ $\psi$  transverse momentum.

**Primary author:** Mr FENG, Zhao (Central China Normal University)

**Presenter:** Mr FENG, Zhao (Central China Normal University)

**Session Classification:** Parallel Session 1