

Abstract Submitted
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The elliptic flow of di-leptons in 200 GeV Au+Au collisions at STAR¹ XIANGLI CUI, University of Science and Technology of China (USTC) — Di-leptons are ideal probes of the strongly interacting hot, dense medium created at RHIC. They are not affected by the strong interaction once produced, therefore they can probe the whole evolution of the collision. The di-lepton spectra in the intermediate mass range are directly related to thermal radiation of the QGP. In the low mass range, we can study the vector meson in-medium properties through their di-lepton decays, the observable of possible chiral symmetry restoration. In addition to the spectrum, the elliptic flow of di-leptons, which is sensitive to the early time dynamics, might also shed light on the properties of the medium. In year 2010, a large amount of data were taken in 200 GeV Au+Au collisions with the full time-of-flight detector in operation, which enables the elliptic flow measurements of di-leptons. In this poster, we will present the details of the analysis including background subtraction and elliptic flow methodology. The status of the elliptic flow measurements of di-leptons from low to intermediate mass region will be presented in 200 GeV Au+Au collisions.

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