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Study of system size dependence on the production and suppression of quarkonium yields

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Relative yields of quarkonium and transverse momentum (pT) spectrum of charged particles have the potential to map and test the properties of QGP medium. Inside the medium, as the quarkonia are largely exposed to the color-charge screening and gluon dissociation, the scattered partons experience a loss of energy due to gluon emission and parton splitting mainly. In this study, we evaluate the system size dependence of color screening and gluon-induced dissociation in the survival of quarkonium states in heavy-ion collisions, Pb+Pb ions at $\sqrt{s} = 5.02$ TeV and Xe+Xe ions at $\sqrt{s} = 5.44$ TeV separately. Also, the dependence of parton energy loss in the production and suppression of quarkonium yields will be estimated. We will compare our calculations with measurements performed at the same energies in LHC experiments

Is this abstract from experiment?

Nο

Name of experiment and experimental site

N/A

Is the speaker for that presentation defined?

No

Details

N/A

Internet talk

Yes

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