Online Strangeness in Quark Matter Conference 2021



Contribution ID: 128

Type: Experimental talk

Quarkonium results from PHENIX

Friday 21 May 2021 10:30 (20 minutes)

Quarkonia are among the most important tools for studying Quantum Chromodynamics (QCD) in high energy hadronic collisions. Despite decades of extensive studies, we still have a limited knowledge of their production mechanism and hadronization; and carrying out as many measurements as possible in p+p collisions over a broad kinematic region at different energies is essential to understanding their production mechanisms. Quarkonia are very valuable probe in heavy-ion collisions to study the properties of the quark gluon plasma, and also an important probe in small collision systems to study cold nuclear matter effects, which are also present in large collision systems.

The PHENIX experiment has measured inclusive J/ψ production as well as its angular decay coefficients at mid (|y| < 0.35) and forward (1.2 < |y| < 2.2) rapidities in p+p collisions at 200 GeV and 510 GeV; and at forward (1.2 < |y| < 2.2) rapidity in a variety of small collision systems (p+Al, p+Au and ³He+Au) at 200 GeV. Results from these measurements will be presented.

Collaboration

PHENIX

Author:SARSOUR, Murad (Georgia State University)Presenter:SARSOUR, Murad (Georgia State University)Session Classification:Heavy Flavor (Charmonia)