



Contribution ID: 93

Type: Talk

Measurements of angular correlation function in the STAR BES data

Wednesday 8 November 2017 18:20 (15 minutes)

Abstrakt:

The angular correlation function (CF) refers to the correlation of particles in the relative pseudorapidity and relative azimuthal angle. It is used to study strongly interacting matter properties at relativistic energies. Recent results from the ALICE experiment at LHC show unexpected structures of CF in the proton-proton and antiproton-antiproton correlations. These observations are suggesting that study of CF of identified particles can provide more detailed insight into nuclear matter properties, in comparison with measurements of unidentified particles.

The STAR capability of identifying particles at mid-rapidity, paired with the data from broad energy range of Au+Au collisions in the Beam Energy Scan program, provide unique opportunity to investigate the phase diagram of strongly interacting matter through the CF analysis. In this talk recent STAR experimental results from the Au+Au collisions at $\sqrt{s_{NN}} = 19.6$ GeV from the RHIC's Beam Energy Scan will be presented.

Primary author: LIPIEC, Andrzej (Warsaw University of Technology)

Presenter: LIPIEC, Andrzej (Warsaw University of Technology)

Session Classification: Session 3; 8-nov 2017;

Track Classification: World experiments...