

Strangeness in Quark Matter 2019



Contribution ID: 186

Type: **Contributed talk**

Directed flow, vorticity and Lambda-Polarisation in heavy-ion collisions at FAIR and NICA energies

Tuesday 11 June 2019 16:50 (20 minutes)

The directed flow, vorticity and polarisation of Lambda were calculated within the UrQMD model for intermediate-centralty A+A collisions at FAIR and NICA energies. Also, we investigated vorticity and helicity development of protons and pions in these reactions. The slope of the directed flow dv_1/dy at midrapidity in calculations with and without mean-field potentials is obtained as a function of the beam energy for p , p^- , Λ , Λ^- , K^+ , K^- , π^+ , π^- . Results of the calculations are compared to the STAR experimental data.

Collaboration name

Track

Hydrodynamics, chirality and vorticity

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Session Classification: Hydrodynamics, Chirality and Vorticity