Strangeness in Quark Matter



Contribution ID: 126 Type: Talk

Landau hydrodynamics for non-central heavy-ion collisions and longitudinal scaling of elliptic flow

Tuesday, 23 July 2013 15:20 (20 minutes)

Landau solution of hydrodynamics is generalized for the non-central high-energy nuclear collisions. The multiparticle production after hydrodynamic expansion from the transversely asymmetric initial state shows elliptic flow formation.

Moreover, obtained solution does reproduce the observed longitudinal scaling of the elliptic flow for the different collision energies at LHC and RHIC. It will be argued, that the analyticity of the solution allows us to separate collective pressure driven flow effects from the initial conditions.

Primary author: TAMOSIUNAS, Karolis (Vilnius University (LT))

Presenter: TAMOSIUNAS, Karolis (Vilnius University (LT))

Session Classification: Flow