Contribution ID: **152**   Type: **Talk**

Analysis of particle Pt-spectra in model-generated heavy-ion collisions using Tsallis statistics

Friday, July 21, 2023 10:00 AM (30 minutes)

Application of non-extensive Tsallis statistics to study spectra of particles produced in proton-proton or nucleus-nucleus collisions at relativistic energies becomes very popular nowadays. In present work we fit the transverse momentum spectra of hadrons from intermediate heavy-ion collisions, generated by two microscopic transport models, UrQMD and SMASH, to Tsallis distribution. The analysis is done for the evolution of hot and dense nuclear matter in the central cell of central heavy-ion collisions and for the infinite nuclear matter, simulated in both models by means of a box with periodic boundary conditions. The obtained results favour the use of the Tsallis statistics in comparison with the Boltzmann-Gibbs one.

Is this abstract from experiment?

No

Name of experiment and experimental site

N/A

Is the speaker for that presentation defined?

Yes

Details

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Internet talk

No

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Session Classification: High Energy Particle Physics

Track Classification: Main topics: Heavy Ion Collisions and Critical Phenomena