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Type: Oral presentation

## Boltzmann vs Tsallis: analysis of transverse momentum spectra of hadrons in model-generated heavy-ion collisions

Thursday 12 October 2023 16:00 (30 minutes)

We fit the transverse momentum spectra of hadrons from intermediate heavy-ion collisions, generated by two microscopic transport models, UrQMD and SMASH, to Boltzmann-Gibbs and to Tsallis distributions. The analysis is done (i) for the evolution of hot and dense nuclear matter in central area of central heavy-ion collisions and (ii) for the infinite nuclear matter, simulated in both models via a box with periodic boundary conditions. The obtained results favour the application 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

Yes

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**Presenter:** ZABRODIN, Evgeny

**Session Classification:** Parallel Session 2

**Track Classification:** Heavy Ion Collisions