



ID de Contribution: 31

Type: Non spécifié

Three-dimensional source sizes and shapes of hadron emission in EPOS

mardi 5 novembre 2024 16:25 (25 minutes)

Femtoscopic measurements explore the strongly interacting Quark-Gluon-Plasma (sQGP) via examining the space-time characteristics of heavy-ion collisions using correlation functions of observed particles. This talk reports on an investigation of the space-time geometry of heavy-ion collisions based on the EPOS model, a state-of-the-art event generator. Based on its success with reliably reproducing many observables, we utilize it to investigate source geometry, and to explore the reason of the appearance of non-Gaussian, Lévy-type source distributions observed recently in multiple experiments. We show that such non-Gaussian, and in particular Lévy-stable source distributions arise on an event-by-event level, even if a three-dimensional distribution is assumed. We compare the event-averaged source parameters to experimentally obtained values.

Auteur principal: Mlle ÁRPÁSI, Emese (Eötvös Loránd University)

Orateur: Mlle ÁRPÁSI, Emese (Eötvös Loránd University)