Contribution ID : **221** Type : **Poster**

Estimation of non-femtoscopic effects in p+p and p+A collisions at RHIC energies using PYTHIA and HIJING generators

Monday, 2 October 2017 15:10 (170)

The spatial extents of particle emission source in high-energy collisions can be measured using two-particle femtoscopic correlations. In collisions with small multiplicities, such as proton-proton collisions, correlation functions can be distorted by non-femtoscopic effects, for example correlations caused by energy-momentum conservation laws, jets and mini-jets. To estimate these effects, a simulation of p+p collisions at $\sqrt{s}$=200 and 510˜GeV using PYTHIA and HIJING generators and p+Au collisions at $\sqrt{s_{NN}}$=200˜GeV using HIJING were performed. In this talk, we will present charged pion and kaon correlation functions obtained from the Monte Carlo generators and their comparison to the experimental data.

Primary author(s) : Ms. KHYZHNIAK, Evgenija (National Research Nuclear University MEPhI); Mr. NIGMATKULOV, Grigory (National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)); Mr. ERMAKOV, Nikita (National Research Nuclear University MEPhI (Moscow Engineering Physics Institute))

Presenter(s) : Ms. KHYZHNIAK, Evgenija (National Research Nuclear University MEPhI)

Session Classification : Poster session and coffee&reception