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**BUMPING STRUCTURE OF INITIAL ENERGY DENSITY DISTRIBUTIONS
AND PECULIARITIES OF PION SPECTRA IN A + A COLLISIONS**

The effect of a fluctuating bumping structure of the initial conditions on spectra and the collective evolution of matter created in heavy-ion collisions in the frameworks of the Hydro-Kinetic Model is investigated. As motivated by the glasma-flux-tube scenario, the initial conditions are modeled by the set of four high energy-density tube-like fluctuations with longitudinally homogeneous structure within some space-rapidity region in a boost-invariant 2D geometry. It was found that the presence of transversally bumping tube-like fluctuations in initial conditions strongly affects the hydrodynamic evolution and leads to emergence of conspicuous structures in the calculated pion spectra. It was observed that the 4 tube initial configuration generates a four-peak structure in the final azimuthal distributions of one-particle spectra.

Keywords: nucleus-nucleus collisions, hydrodynamics, fluctuating initial conditions, pion spectrum.