

Promising experimental approach in the intermediate energy region of relativistic nuclear collisions: Existing experimental data and possible research tasks for the NICA JINR accelerator complex

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The analysis of some specific features of secondary particle production with taking into account of collective effects in nuclear matter is performed based on the vast experimental material obtained in the experiments with the bubble chambers. A unified form of self-similarity description of inclusive π -meson distributions in the cumulative and non-cumulative energy region is presented. Promising experiments at the energies of the accelerator complex NICA are considered. Optimal kinematical conditions for finding new regularities in multiparticle relativistic nuclear collisions are discussed.