XXVIth International Baldin Seminar on High Energy Physics Problems "Relativistic Nuclear Physics and Quantum Chromodynamics"



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The development of the ideas of A.M.Baldin on description of multiparticle production in relativistic nuclear collisions based on the properties of the Lobachevsky space

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The notion of an elementary particle proposed by A.M.Baldin and the ideas of examination of multiple particle production in the space of relative velocities are considered. The transition to the space of relative rapidities (the Lobachevsky space) is substantiated. The connection between the fundamental distance in the rapidity space following from the properties of the Lobachevsky geometry and the size of the proton is examined. The structure of the directed nuclear radiation is described based on the experimental bubble chamber data. The method for separation of collective flows (jets) in multiparticle production is proposed on the basis of relativistically invariant description of relative distances in the rapidity space.

Author: BALDIN, Anton (JINR)

Presenter: BALDIN, Anton (JINR)

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