New Results and Plans in Relativistic Nuclear Physics at JINR (Dubna)

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Abstract

New results of investigations in relativistic nuclear physics at the Laboratory of High Energies, Joint Institute for Nuclear Research, are presented. The correlation data on production of the cumulative proton pairs produced in the interactions of the internal nuclear beams of the novel accelerator Nuclotron with nuclear targets are presented. The transverse interaction radius for studying the process was determined in this experiment. Preliminary data obtained at the external beam of the Nuclotron are also presented. We have obtained new data for fragmentation of tensor polarized deuterons into cumulative pions at Synchrophasotron which are discussed in the report. The results of some other experiments carried out at the Laboratory are reviewed and the plans for future are considered.

Preprint submitted to Elsevier Preprint *20 December 2000*