

THE BM@N EXPERIMENT FOR STUDIES OF BARYONIC MATTER AT THE NUCLOTRON

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BM@N (Baryonic Matter at Nuclotron) is the first experiment realized at the accelerator complex of NICA-Nuclotron. The aim of the BM@N experiment is to study interactions of relativistic heavy ion beams with fixed targets. The scientific program of the BM@N experiment comprises studies of nuclear matter in the intermediate energy range between experiments at SIS and NICA/FAIR facilities. The BM@N experiment is in the starting phase of its operation and has recorded first experimental data. The experimental runs were performed in the carbon, argon and krypton beams with the kinetic energy ranging from 2.3 to 4 GeV per nucleon. The extended configuration of the BM@N set-up is being developed for the heavy ion beam program. The future experimental program of the experiment and first experimental results on the production of charged kaons and Lambda-hyperons are presented.