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# Development of the interaction trigger system for study of nucleus – nucleus collisions at BM@N/NICA experiment

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The fixed-target experiment "Baryonic Matter at Nuclotron" (BM@N) is aimed to study characteristics of hot and dense nuclear matter produced in nucleus – nucleus collisions at beam energies of 2 – 4 A GeV. The developed trigger system is an important part of the experiment and allows fast and effective selection of nucleus – nucleus interactions in a target. It includes several subsystems such as beam and multiplicity detectors, fast electronics, trigger unit with programmable logic, graphical user interface and special software for monitoring beam conditions, detector/trigger operation and communication with DAQ. The trigger system was implemented and evaluated in the recent BM@N experimental run with a Xe ion beam and a CsI target. The description of the system is presented with emphasis on its performance in the run.

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