## Welcome to NICA days 2015 in Warsaw



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## ToF system of the BM@N experiment.

Wednesday 4 November 2015 17:00 (20 minutes)

The BM&N is designed as a spectrometer capable of detecting charged hadrons, electrons and photons in heavy-ion collisions in the energy range of the Nuclotron. To reach this goal the detector will include a precise tracking system and a high-performance particle identification system based on time-of-flight measurements. ToF system consist of two part: ToF400 and ToF700 which are located on 4 m and 7 m from target respectively. ToF700 wall will provide with the pion/kaon separation up to 3 GeV/c and proton/kaon separation up to 5 GeV/c in "high rate" region near to beam. ToF400 will provide identification of charged hadrons at intermediate momentum  $(0.1-2.5~{\rm GeV/c})$  and large angles. In both case ToF system will based on multigap Resistivity Plate Chamber with time resolution better than 80 ps.

Result of R&D and beam test of mRPC for ToF400 will present in report. The construction of ToF400 wall, design of gas box for mRPC, and gas system are discussing.

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