

A Monte Carlo simulation of the BM@N detector performance for strangeness production studies in heavy-ion interactions

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In a few months, the accelerator complex of the Booster and Nuclotron at JINR (Dubna) will be ready to accelerate heavy ions. At the same time, the Baryonic Matter at Nuclotron (BM@N) experimental setup is completing its configuration to investigate relativistic heavy-ion beam interactions with fixed targets.

One of the most important experimental tasks of the BM@N physics program is determination of the equation of state of the high-density baryonic matter. This task can be accomplished via measurements of the (multi)strange hyperon excitation function, i.e. hyperon yields at different energies.

In the talk, the results of the Monte Carlo simulation of the BM@N detector performance for studying strangeness production in heavy-ion interactions will be presented.

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