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Feasibility study of the anisotropic flow measurements with fixed-target mode of the MPD experiment at NICA

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One of the primary objectives of beam energy scan programs involving relativistic heavy-ion collisions at energies of √sNN=2-5 GeV is to investigate the high-density equation of state (EoS) and explore potential phase transitions in dense baryonic matter. This talk will be dedicated to a performance study of differential anisotropic flow measurements for identified charged hadrons at T=2.5A GeV (√sNN=2.87 GeV). The analysis employs a realistic data simulation and reconstruction approach for the MPD experiment at NICA, operating in fixed-target mode (MPD-FXT).

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