## XXVIth International Baldin Seminar on High Energy Physics Problems "Relativistic Nuclear Physics and Quantum Chromodynamics"



Contribution ID: 112 Type: 20 min.

## Collective flow of lambda hyperons in the MPD experiment at NICA energies

Friday 19 September 2025 09:30 (20 minutes)

Collective flow measurements are essential for studying the strongly-interacting matter formed in relativistic heavy-ion collisions. Lambda hyperons serve as unique probes due to their strangeness, offering distinct sensitivity to partonic collectivity and hadronization mechanisms compared to lighter particle species. This study investigates the directed and elliptic flow of lambda hyperons in Xe+Xe collisions at center-of-mass energy 2.87 GeV generated with the UrQMD model. The results are necessary for the analysis of the upcoming experiment with the MPD detector.

Author: TROSHIN, Valery (JINR)

Co-authors: FLUSOVA, Daria (TPU); PARFENOV, Peter (JINR, NRNU MEPHI); TARANENKO, Arkadiy (VBL-

HEP JINR)

Presenter: TROSHIN, Valery (JINR)

Session Classification: Relativistic heavy ion collisions

Track Classification: Relativistic heavy ion collisions