

## Prospects for Dilepton Measurements in MPD at NICA

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The Multi-Purpose Detector (MPD) experiment is a flagship heavy-ion experiment at the NICA facility under construction at JINR, in Dubna, Russia expected to start operation in 2025. The experiment will operate in the energy range  $\sqrt{s_{NN}} = 4-11$  GeV which covers the high net-baryon density region of the QCD phase diagram. Among the various physics topics covered by the MPD physical program, the measurements of dileptons have the potential to provide unique insights into the properties of the produced medium in heavy-ion collisions in this energy range. Once produced, dileptons leave the interaction region mostly unchanged. The slope parameter of the dielectron mass spectra in the intermediate mass region probe the initial temperature of the fireball. The yield of low-mass pairs and spectral shapes of the low-mass vector mesons carry information about the chiral symmetry restoration and the lifetime of the system.

In this presentation, we will report the current status of the NICA facility and the MPD detector. The plans for dilepton measurements together with selected physics performance studies will be presented.

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