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The MPD-ITS project. Status and Perspectives.

Wednesday 3 July 2024 10:30 (20 minutes)

The Inner Tracking System (ITS) of the Multipurpose Detector (MPD) will be a vertex silicon detector designed for the efficient registration of short-lived products of nucleus–nucleus interactions and it is planned to be built using the novel technology of monolithic active pixel sensors (MAPS) following the corresponding know-how and technological transfer from CERN's ALICE-ITS upgrade project (ALICE-ITS2) to JINR to create a large-area MAPS-only tracker at NICA. The project is being implemented as a collaboration of several institutions from Russia and China lead by JINR and the Central China Normal University (CCNU) respectively. This sophisticated and ambitious project represents equally the possibility of implementing at JINR the latest technology on components and production process, and the necessity of creatively overcoming the many obstacles for getting access to such technologies from Russia the current geopolitical conditions. During the presentation current status of the multiple aspects of the project will be reviewed along with the perspectives for the use of the MAPS technology at NICA.

Section

Heavy ion collisions at Intermediate and high energies

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