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# MCORD - MPD Cosmic ray detector

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## Content

Multi-Purpose Detector (MPD) is a part of Nuclotron-based Ion Collider fAcility (NICA) located in Dubna, Russia. For full functionality, the MPD needs an additional trigger system for off-beam calibration of MPD sub-detectors and for rejection of cosmic ray particles (mainly muons). The system could also be very useful for astrophysics observations of cosmic showers initiated by high energy primary particles. The consortium NICA-PL comprised of several Polish scientific institutions has been formed to define goals and basic assumptions for MPD Cosmic Ray Detector (MCORD). This presentation describes the design of the MCORD detector based on plastic scintillators with silicon photomultiplier photodetectors (SiPM) for scintillation readout and electronic system based on MicroTCA crate. Some simulations for MCORD detector performance are also presented.

## Area of contribution

Experiment: prototypes and instrumentations

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