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## **Mock Data Challenge for the MPD experiment on the NICA cluster**

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The simulated data processing before receiving first experimental data is an important issue in the high-energy physics experiments. This work presents Mock Data Challenge (MDC) for the MPD experiment at the NICA accelerator complex. It uses the ongoing simulation studies to exercise in a stress-testing distributed computing infrastructure and experiment software in the full production environment from simulated data through a physical analysis. The presentation describes a hardware part –the current scheme and structure of the distributed NICA cluster for storing and processing data obtained at the MPD detector. In addition, software for building data storage and parallelization of the MPD data processing is noted. The MDC presented in the work allows one to test the full processing chain (simulation, reconstruction and following physical analysis) for the MC data stream parallelized by the MPD scheduling system on the NICA cluster and helps to identify its potential issues.

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