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CURRENT WORKFLOW EXECUTION USING JOB SCHEDULING FOR THE NICA EXPERIMENTS

Thursday, 13 September 2018 14:00 (15 minutes)

Simulation and experimental data processing is an important issue in modern high-energy physics experiments. High interaction rate, high particle multiplicity and long sequential processing time of millions of events are the main reasons to parallelize data processing on distributed computing systems for the NICA experiments. The report presents one of the directions of distributed event processing: job scheduling for user task distribution on computing clusters. The software and hardware environments being used for the current workflow execution are briefly noted. The MPD-Scheduler system developed to simplify parallel execution of user macros for simulation, reconstruction and data analysis is described in details. The practical values of the speedup for event processing in the MPD experiment are shown. The possible workflow management systems being under discussion for the NICA experiments are also noted.

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