



Proposal: Developing of the tools for a physics analysis of the MPD data at NICA

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Tools for physics analysis of the data MPD

- ▶ Before starting the data taking, it is necessary to have tools which gives you possibility to analyses the full data sample.
- ▶ Now it is ready huge samples of simulated and reconstructed data with deferent MC.
- ▶ Running the jobs for full statistics it's already takes huge time.
- ▶ Grid is main solution for be more effective to run the jobs for physicists.
- ▶ For be more effective for physics results it's necessary the tools to run in Grid.
- ▶ Creating of the tools for physics analysis to solve problem to running full data samples is one of the main tasks today.

Proposal: the tools for analysis of the data

- ▶ Developing the user-friendly tools for the physics analysis of the MPD data
- ▶ Developing the tools for main distributions of data with “standard cuts”.
- ▶ Developing the tools with classes of the data with different multiplicity events.

- ▶ This tools will help you run the jobs for full statistics and different MC samples

“Standard Cuts” from Victor

- DCM-QGSM-SMM, BiBi@9.2
- Event selection:
 - ✓ at least one primary track at $|\eta| < 1$
 - ✓ reconstructed vertex, z-vertex $\neq 0$
 - ✓ $|z\text{-vertex}| < 130$ cm
- Track selections:
 - ✓ $|DCA_{x,y,z}| < 2$ cm
 - ✓ number of TPC hits, nhits > 10
 - ✓ $p_T > 0.1$ GeV/c
 - ✓ $|\eta| < 0.5$
 - ✓ efficiency correction vs. z-vertex and η



Tutorials for new users of MPD

- ▶ Tutorial for running the jobs at SLURM of HEDRA
 - ▶ Tutorial for running the jobs at GRID of LIT
 - ▶ Manuals for getting the certificate
 - ▶ Manuals for running the jobs of MPD
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- ▶ Please send me your comments, proposals, solution
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- ▶ Thanks for attention