

A short physics motivation for the request

1. A Monte-Carlo model to use

vHLLE+UrQMD model

hybrid model with viscosity, allowing to choose equation of state:

-crossover equation of state (EoS)

- first order EoS

created by Yurii Karpenko describing well bulk observables of RHIC BES .

2 we need of 2 sets of simulations with 1PT and crossover PT:

2. The requested combination of

- **collision system (e.g. Au+Au)**

Au-Au

- **collision energy (eg. 11 AGeV)**

7.7, 11.5

- **requested centrality or centralities**

0-5%, 5-10%, 10-20%, 20-50%

- **number of events at each combination of system+energy+centrality**

7.7 AuAu , 0-5% centrality, 1PT EoS 1 mln events

7.7 AuAu , 0-5% centrality, crossover (XPT) EoS 1 mln events

7.7 AuAu , 5-10% centrality, 1PT EoS 1 mln events

7.7 AuAu , 5-10% centrality, XPT EoS 1 mln events

7.7 AuAu , 10-20% centrality, 1PT EoS 2 mln events

7.7 AuAu , 10-20% centrality, XPT EoS 2 mln events

7.7 AuAu , 20-50% centrality, 1PT EoS 3 mln events

7.7 AuAu , 20-50% centrality, XPT EoS 3 mln events

11.5 AuAu , 0-5% centrality, 1PT EoS 1 mln events

11.5 AuAu , 0-5% centrality, XPT EoS 1 mln events

11.5 AuAu , 5-10% centrality, 1PT EoS 1 mln events

11.5 AuAu , 5-10% centrality, XPT EoS 1 mln events

11.5 AuAu , 10-20% centrality, 1PT EoS 2 mln events

11.5 AuAu , 10-20% centrality, XPT EoS 2 mln events

11.5 AuAu , 20-50% centrality, 1PT EoS 3 mln events

11.5 AuAu , 20-50% centrality, XPT EoS 3 mln events

4. The version of reconstruction software and MPD geometry to use

We have not information about current status of the reconstruction software. Therefore we can't specify the version.

5. Any other special requests for the production