

## MPD detector for study of event-by-event fluctuations in heavy ion collisions at NICA

*Tuesday, 11 October 2016 16:05 (20)*

A heavy ion collision data (Au+Au) was simulated at MPD (Multi Purpose Detector) at NICA (Dubna) during the study of the possible critical point in the phase diagram of hot nuclear matter. Real detector effects were simulated using realistic simulation of the MPD TPC (Time Projection Chamber), with as many details as possible. Also a new version of particle identification was developed and used for estimating MPD feasibility for this study including TPC and TOF (time of flight) identification.

**Primary author(s) :** MUDROKH, Alexander (JINR); ZINCHENKO, Alexander (JINR); LOBASTOV, Sergey (JINR); KOLESNIKOV, Vadim (JINR)

**Presenter(s) :** MUDROKH, Alexander (JINR)

**Session Classification :** Heavy Ion Student Session - 2

**Track Classification :** Nuclear physics and particle physics