

Parameters of the facing particles

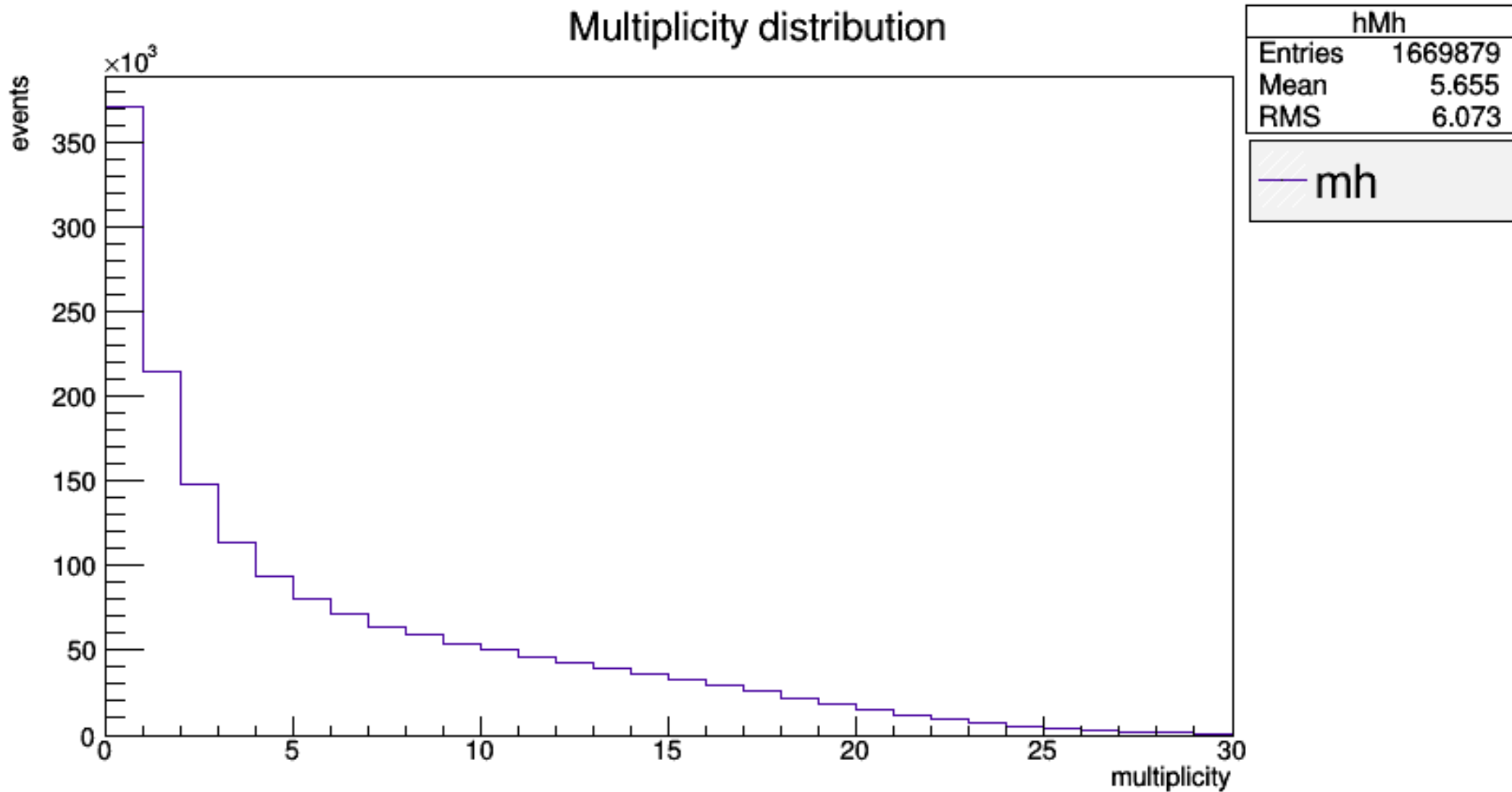
Made by Zherebtsova Elisaveta

08.04.16

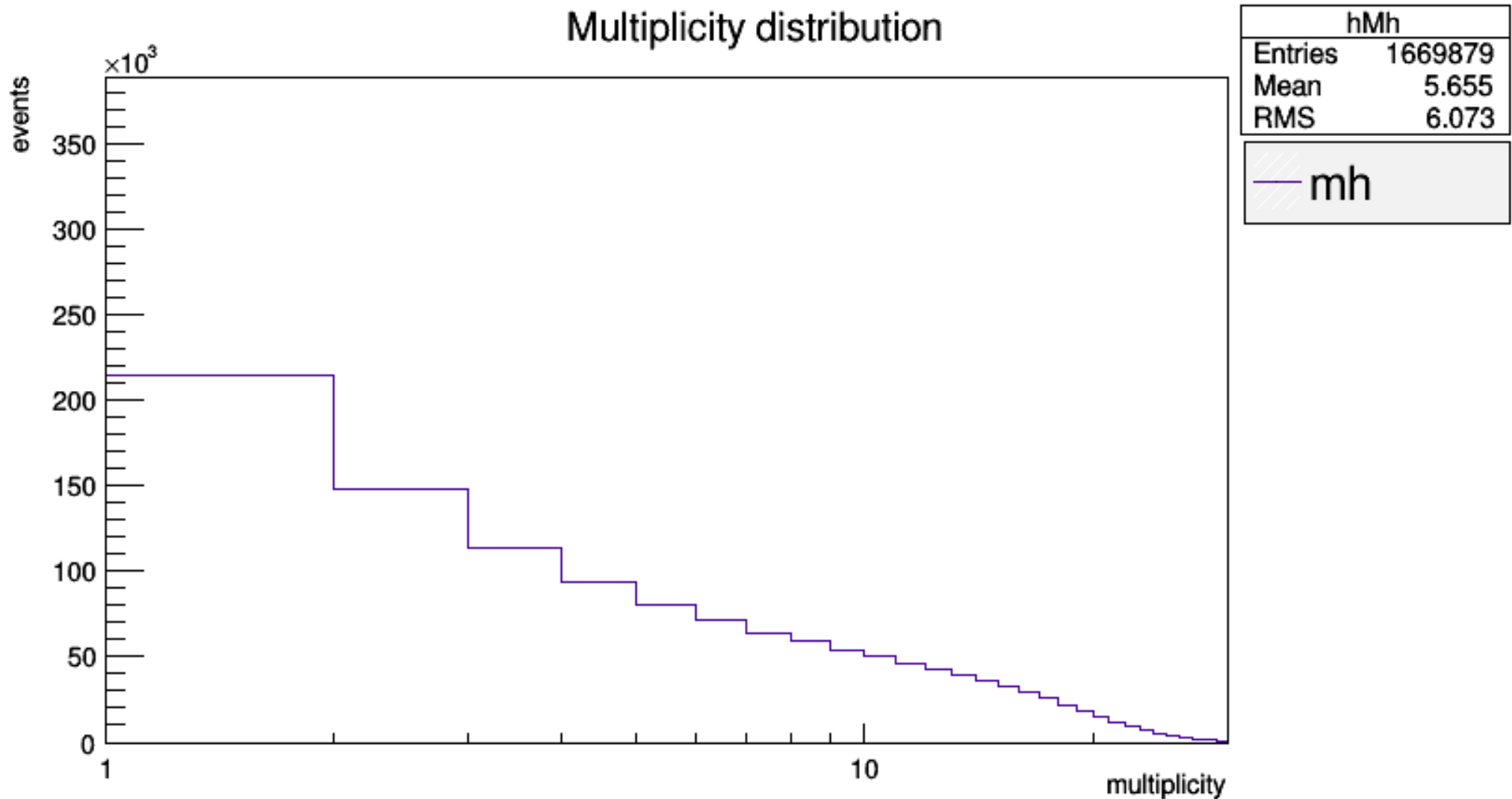
The used data:

- This was the PHENIX experiment
 - System of collision: Au+Au
 - at $\sqrt{S_{NN}}=62.4$ GeV

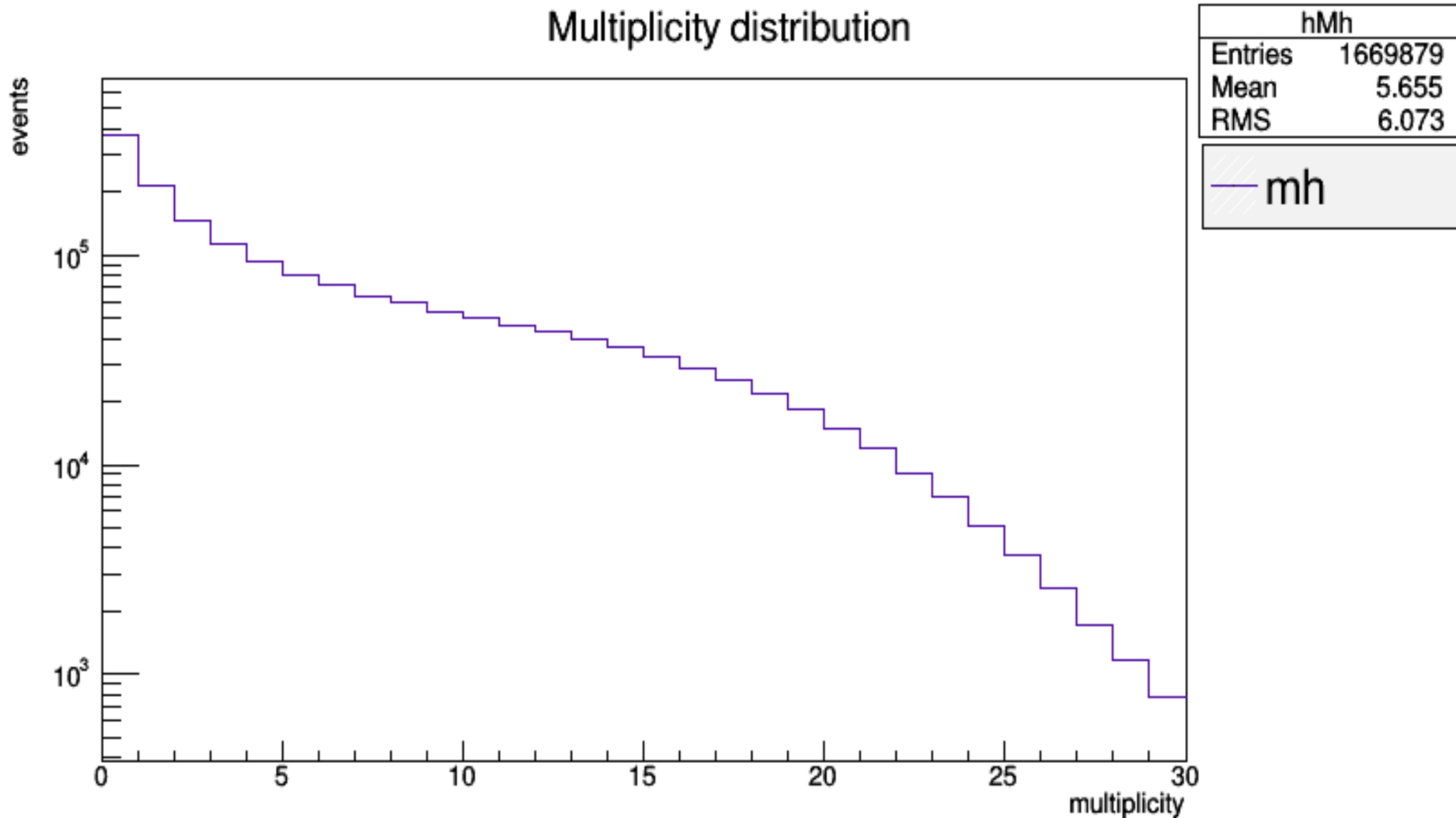
Multiplicity distribution on events



Multiplicity distribution on events with logX scale

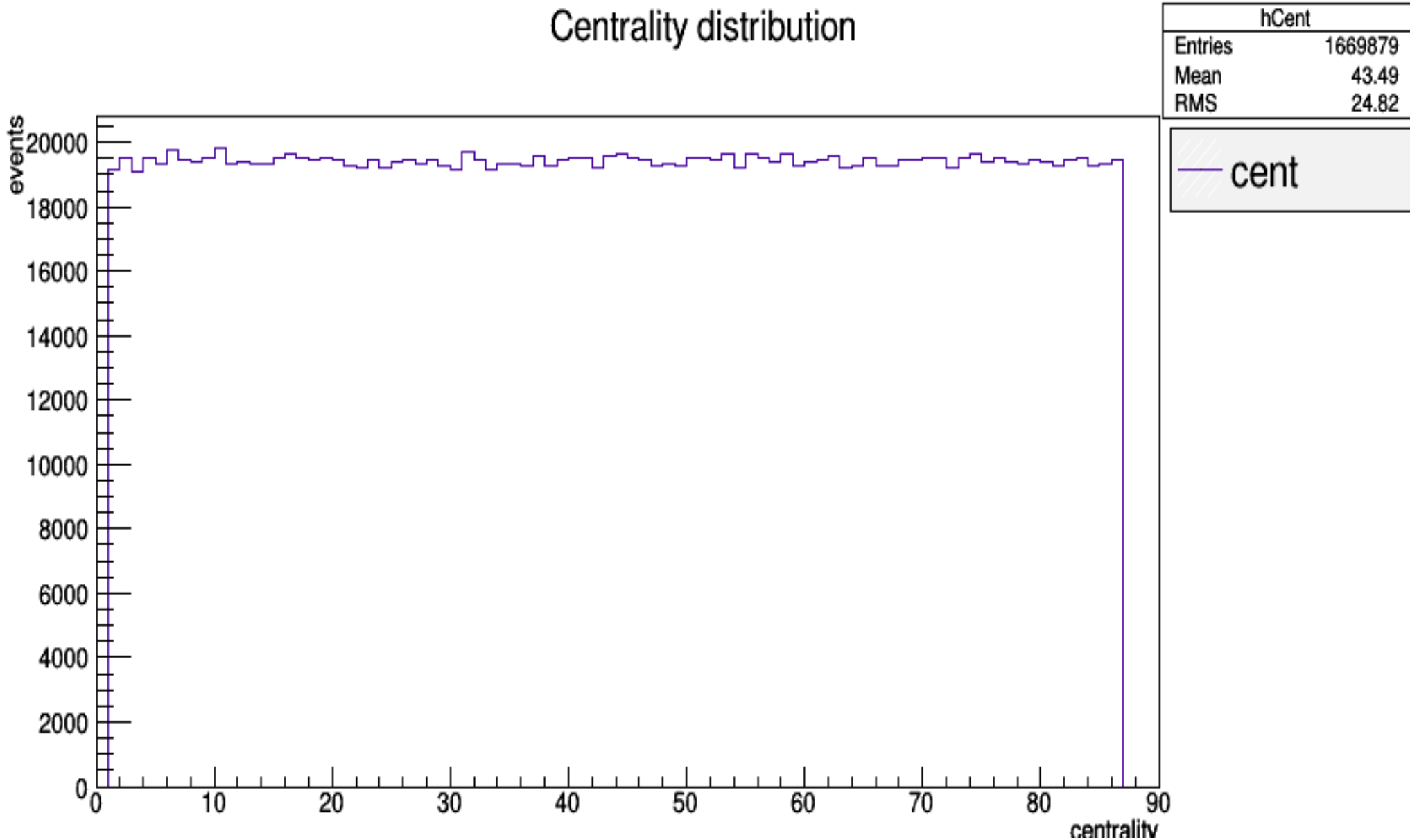


Multiplicity distribution on events with logY scale



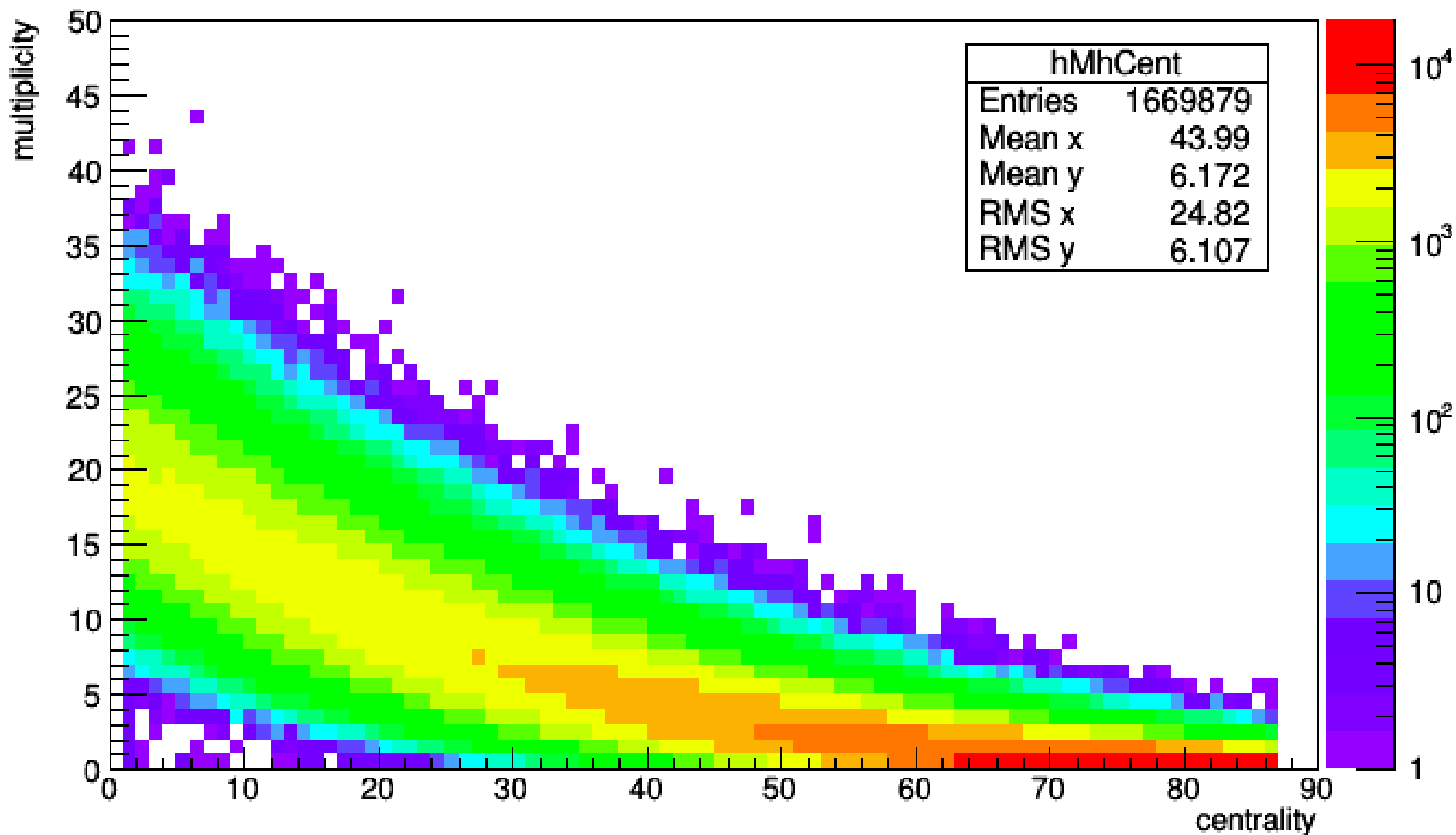
Centrality distribution on events

Centrality distribution



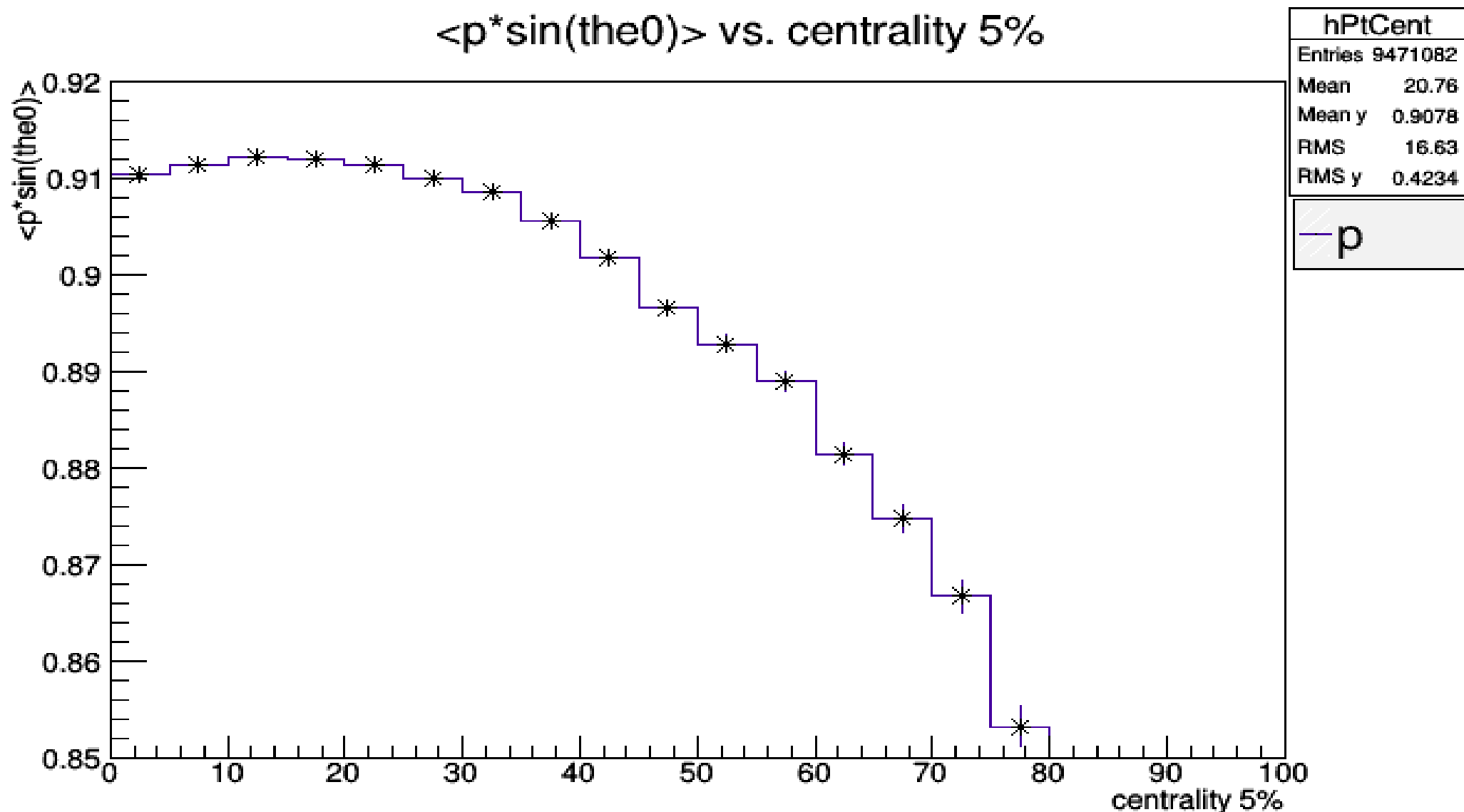
Dependence of multiplicity on centrality

Mh vs. Cent distribution



Dependence of an average transverse impulse on centrality 5%

$\langle p \sin(\theta_0) \rangle$ vs. centrality 5%



Conclusion:

- During the work histograms of dependence of multiplicity on centrality, distributions of centrality and multiplicity on events and dependence of an average transverse impulse on centrality have been constructed.
- Proceeding from the received results it is possible to draw a conclusion that with increase in number of events multiplicity decreases.
- In the most central collisions multiplicity is more.
- With a growth of centrality of 5% the average transverse impulse slowly decreases.
- The number of events changes less, than much, at increase in centrality of collisions.
- Events divide on centrality so that in each bin there was approximately identical number of events therefore the number of events almost doesn't change at increase in centrality