# **Prospects of Elliptic Flow Studies at NICA/MPD** Nikolay Geraksiev for the MPD Collaboration



VBLHEP, Joint Institute for Nuclear Research, Dubna, Russia FPET, Plovdiv University "Paisii Hilendarski", Plovdiv, Bulgaria Email: nikolay.geraksiev@gmail.com



Anisotropic flow presents a unique insight into heavy ion collision physics.

The presented poster reveals the prospects of studying elliptic flow at the NICA/MPD facility through the UrQMD model. Presented are results on elliptic flow for simulated and reconstructed hadrons at the planned NICA energy range.







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## **Anisotropic Flow**

- \* Non-zero impact parameter

- \* Momentum anisotropy





### **Event-plane Angle & Resolution**

- \* E-P Angle fit with BW \* Resolution by sub-events for all events
- \* Integrated flow for all events















## **Conclusion:**

Elliptic flow studies may provide a better understanding of the initial fireball conditions. To assess NICA/MPD capabilities in this regard simulated events were reconstructed and several hadrons were analyzed. Even though the data set is limited, the results are promising merit further investigation. and