

# Global Lambda polarization in heavy-ion collisions with AMPT model

## Summary

**Abstract** We study the global polarization of Lambda hyperons in peripheral Au+Au collisions in the energy range  $\sqrt{s_{NN}} = 7.7 - 200$  GeV by the A Multi-Phase Transport (AMPT) model. Our results for the global  $\Lambda$  polarization agree with recent STAR data. Furthermore we find a few features of the vorticity field in lower collisional energies which may contribute partially to the energy behavior of the  $\Lambda$  polarization.

**Primary author:** Ms LI, Hui (USTC)

**Co-authors:** PANG, LongGang (Central China Normal University); Prof. WANG, Qun (University of Science and Technology of China); Mr XIA, Xiaoliang (USTC)

**Presenter:** Ms LI, Hui (USTC)