



Contribution ID: 168

Type: Talk

## Effect of hadronization on Lambda polarization in heavy ion collisions

Friday 27 August 2021 12:00 (30 minutes)

With the PICR hydrodynamic model, we study the polarization splitting between  $\Lambda$  and  $\bar{\Lambda}$  at RHIC BES energy range, based on the meson field mechanism. Our results fit to the experimental data fairly well.

Besides, two unexpected effect emerges: (1) the baryon density gradient has non-trivial and negative contribution to the polarization splitting; (2) for 7.7 GeV Au+Au collisions within the centrality range of 20%-50%, the polarization splitting surprisingly increases with the centrality decreases. The second effect might help to explain the significant signal of polarization splitting measured in STAR's Au+Au 7.7 GeV collisions..

### Is this abstract from experiment?

No

### Name of experiment and experimental site

N/A

### Is the speaker for that presentation defined?

Yes

### Details

N/A

### Internet talk

Yes

**Primary authors:** Prof. XIE, Yilong (China University of Geosciences(Wuhan)); CHEN, Gang (China University of Geosciences); CSERNAI, Laszlo Pal (University of Bergen)

**Presenter:** Prof. XIE, Yilong (China University of Geosciences(Wuhan))

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