Quark Matter 2023



Contribution ID: 244 Type: Oral

Large isospin symmetry violation in kaon production

Wednesday 6 September 2023 09:50 (20 minutes)

The recent measurements of NA61/SHINE at the CERN SPS revealed a large violation of isospin symmetry. The ratio of charged to neutral kaons was measured to be 1.22 ± 0.06 in Ar+Sc collisions at 75A GeV/c. This contribution will present the experimental details of this intriguing result. It will also compare it to the world data on charged to neutral kaons ratio in nucleus-nucleus collisions. Finally, based on the recent theoretical work, it will quantitatively show that the observed isospin symmetry violation is large.

Category

Experiment

Collaboration (if applicable)

NA61/SHINE

Primary author: BRYLINSKI, Wojciech (Warsaw University of Technology (PL))

Presenter: BRYLINSKI, Wojciech (Warsaw University of Technology (PL))

Session Classification: Light Flavor

Track Classification: Light and strange flavor