



Contribution ID: 36

Type: **Parallel-Hadron Structure**

Low-energy $\bar{K}N$ interaction from high-energy nuclear collisions

The two-particle momentum correlation function from high-energy nuclear collisions is beginning to be used to study hadron-hadron interaction. In this talk, the K^-p correlation function is discussed with employing the realistic $\bar{K}N$ - $\pi\Sigma$ - $\pi\Lambda$ coupled-channel potential based on the chiral SU(3) dynamics. With the reasonable source function parameters, the theoretical calculations well reproduce the recent ALICE data from various source sizes. The coupled-channel effect and source size dependence of the correlation function are investigated in detail. Finally, the application of femtoscopy to the other hadron systems are discussed.

Primary author: KAMIYA, Yuki (Helmholtz-Institut für Strahlen- und Kernphysik)

Presenter: KAMIYA, Yuki (Helmholtz-Institut für Strahlen- und Kernphysik)