

Hyperon potentials in dense matter from chiral EFT evaluated via heavy-ion collisions (invited talk)

Thursday, April 3, 2025 9:30 AM (30 minutes)

The hyperon single-particle potential (hyperon potential) is a key ingredient for discussing the properties of hyperons in a dense environment, including their existence in neutron stars. In this talk, we will introduce the hyperon potential in nuclear matter based on the baryon forces within modern chiral effective field theory. We will then discuss the validity of these potentials by implementing them into the heavy-ion collision simulator JAM2 and comparing the results with observables.

Presenter: JINNO, Asanosuke (Kyoto University)

Session Classification: Plenary Session