## HHIQCD2024



Contribution ID: 100 Type: 1st and 2nd weeks (Hadron structure and interactions)

## Lattice QCD studies of Hadron interactions from the HAL QCD method

Tuesday, October 22, 2024 2:00 PM (1 hour)

The determination of hadron interactions is one of the most important subjects in nuclear physics, and the obtained interactions serve as the key quantities which bridge different hierarchies of physics, particle physics, nuclear physics and astrophysics.

Recently, a novel theoretical method (HAL QCD method) was proposed to calculate hadron interactions from first-principles calculations by lattice QCD, and various interactions have been successfully determined. In this talk, I will present selected topics for lattice QCD studies of hadron interactions using the HAL QCD method. The results include the latest calculations performed on the physical point using the state-of-the-art supercomputer, "Fugaku".

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Session Classification: Seminar (1,2 week)