

[KEYNOTE] Hadron-Hadron Interactions from Lattice QCD

Thursday, April 3, 2025 9:00 AM (30 minutes)

I will summarize recent progress in the study of hadron-hadron interactions using lattice QCD near the physical pion mass (146 MeV), focusing on the HAL QCD method and its connection to experimental data. In particular, we highlight several key interaction channels: (i) Baryon-Baryon Interactions in the $S=-2$ sector, (ii) Meson-Meson Interactions in the D^*-D (T_{cc}) channel, and (iii) Meson-Baryon Interactions in the ϕ -N, J/ψ -N, and η_c -N channels. The role of two-pion exchange in (iii) will also be discussed.

Presenter: HATSUDA, Tetsuo (RIKEN iTHEMS)

Session Classification: Plenary Session