Contribution ID: **148** Type: **Talk**

1^{-+} Light Hybrid Decay

Thursday, 1 August 2024 09:20 (20 minutes)

We explore the decay properties of the isovector and isoscalar 1^{-+} light hybrids π_1 and η_1 π_1 in $N_f = 2$ lattice QCD at a pion mass $m_\pi \approx 417$ MeV. The McNeile and Michael method is adopted to extract the effective couplings in $N_f = 2$ QCD for the decays.
The $N_f = 3$ degenerate QCD result with physical mixing angle is also a partial quench result.

Primary authors: Mr SHI, Chunjiang (Institude of High-Energy Physics); Mr LIANG, Juzheng (University of Science and Technology of China); CHEN, Siyang (Institude of High-Energy Physics); Prof. SUN, Wei (Institude of High-Energy Physics); Prof. CHEN, Ying (Institude of High-Energy Physics)

Presenter: CHEN, Siyang (Institude of High-Energy Physics)

Session Classification: Hadronic and nuclear spectrum and interactions

Track Classification: Hadronic and Nuclear Spectrum and Interactions