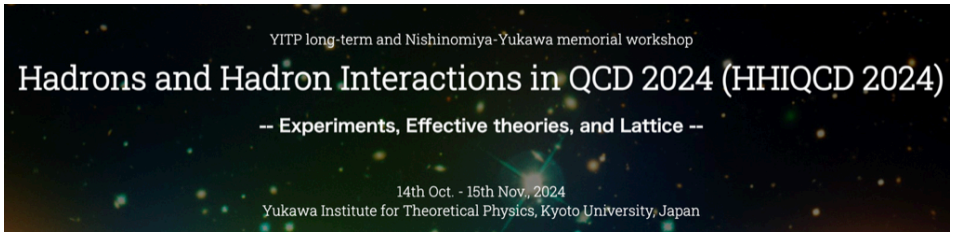

Contribution ID: **21** Type: **1st and 2nd weeks (Hadron structure and interactions)**

Utilizing Twisted Boundary Conditions to Determine DD* Scattering Phase Shifts

Thursday, October 17, 2024 11:30 AM (30 minutes)

In this presentation, we explore the low-energy behavior of DD^* scattering phase shifts using twisted boundary conditions. While Lüscher's method is typically employed to calculate scattering phase shifts between two hadrons from energy spectra, it becomes impractical to achieve high-resolution results using only periodic boundary conditions due to volume limitations. Conversely, twisted boundary conditions allow for a more detailed calculation of scattering phase shifts. Our research applies this technique to the DD^* system to gain a deeper understanding of its properties.

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Presenter: NAGATSUKA, Masato (Tohoku University)

Session Classification: 1-day Workshop (1st week)