

Contribution ID: 35

Type: Talk

Quark mass dependence of doubly heavy tetraquark binding

Monday, 29 July 2024 14:15 (20 minutes)

The existence of bound doubly heavy tetraquark states was confirmed by the recent LHCb discovery of the doubly charmed T_{cc} , less than 1MeV below the meson pair threshold. Other states with two heavy (bottom or charm) quarks could also be bound, perhaps more deeply. Here we discuss our previous work, and the improvements in our current, updated analysis of various heavy-heavy-light-light tetraquark candidates, including the light and heavy quark mass dependence of the binding.

Primary authors: FRANCIS, Anthony (National Yang Ming Chiao Tung University); COLQUHOUN, Brian (University of Glasgow); MALTMAN, Kim (York University); LEWIS, Randy (York University); HUDSPITH, Renwick (York University); PARROTT, William (York University)

Presenter: PARROTT, William (York University)

Session Classification: Hadronic and nuclear spectrum and interactions

Track Classification: Hadronic and Nuclear Spectrum and Interactions