

# XVth Quark Confinement and the Hadron Spectrum



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## Three-hadron systems

*Thursday 22 August 2024 09:00 (30 minutes)*

Whether interested in hadron spectroscopy, nuclear structure, or precision tests of the standard model, three-hadron dynamics play a key role in a broad class of rich physical phenomena. Presently, lattice QCD is the only non-perturbative tool for studying QCD exactly. In this talk, I review novel formal techniques that have allowed to non-perturbatively constraining scattering amplitudes involving three-particle states directly via lattice QCD. As I will discuss, these techniques may also impact future experimental analysis in a variety of processes. Finally, I will present some key lattice QCD calculations, including the first QCD determination of a three-hadron scattering amplitude.

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