

# Resonant multi-hadron systems in (in-)finite volume

*Thursday, 18 January 2024 10:50 (50 minutes)*

The quest of unraveling the nature of excited hadrons necessarily involves determination of universal (reaction independent) parameters of these states. Such determinations require input, either from experiment or theory. The challenge in answering these questions from theory arises from the very structure of the theory of strong interaction – QCD. Lattice gauge theory is the only tool available to us to tackle the non-perturbative dynamics of QCD encoded in the determined finite-volume interaction spectra. Many insights have been gained on resonant two-body systems in the past by studying such spectra. Now – with the advent of the three-body finite-volume methods – advances are being made towards more complex systems. This progress will be discussed in the talk, including theoretical developments and applications to phenomenologically interesting systems.

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