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## Long-range matrix elements with three-body intermediate states

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Several outstanding puzzles involve electroweak interactions of low-energy nuclear systems. Observables such as long-range matrix elements can be used to study processes such as neutral meson mixing or the substructure of hadrons. Contributions from multi-hadron states to these matrix elements are central to many of these puzzles. In this talk, we present a framework for studying long-range matrix elements from lattice QCD, which extends previous work to include three-hadron on-shell effects. We show the relevant finite-volume scaling relations for connecting correlation functions from lattice QCD to the infinite-volume transition amplitudes.

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