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Hadronic Molecules - Theory

Thursday, 25 June 2026 12:00 (30 minutes)

Since the turn of the century it becomes evident that the naive quark model is not capable to describe the rich phenomenology of hadrons, especially in the doubly heavy sector. For a large number of those states a molecular structure, where the states are understood as analogs to atomic nuclei, appears to be a natural description. In this talk I review the theory of hadronic molecules, how they can be described systematically in effective field theories and what imprint this structure leaves in observables. On a few examples I explain non-trivial predictions emerging from the molecular hypothesis that can be tested in future experiments and lattice QCD calculations, promising deep insights into the inner workings of QCD.

Collaboration

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