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Type: Parallel-Few-Body Physics

A1(1260) from lattice QCD

We report the first determination of universal parameters of the axial a1(1260) resonance from lattice QCD [arXiv:2107.03973 [hep-lat] in press at PRL]. Three-body quantization condition (FVU) is generalized and utilized to extract infinite-volume information from lattice eigenenergies. Subsequently, pole position and residua of the three-body resonance are extracted on the second Riemann sheet. Results are compared to the phenomenological ones.

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