

Charm tetraquarks from a holographic perspective

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One of the primary goals of the AdS/QCD program is to describe hadron spectroscopy accurately. The holographic confining potential, typically written through geometrical deformations or AdS bulk dilaton fields that induce confinement, plays a central role in achieving this. Specifically, the dilaton derivatives govern the large z behavior of the holographic confining potential, where z denotes the AdS fifth dimension associated with the emergence of the mass spectrum. In non-linear Regge trajectories anticipated for heavy quark systems, we utilize the WKB approach to derive a suitable confining potential from a given mass spectrum. We calculate the masses for hidden and open charm tetraquark systems with an RMS of less than 10%.

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