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# Potential description of the charmonium from lattice QCD

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We present quark-antiquark potentials for the charmonium, that are calculated using a relativistic heavy quark action for charm quarks and PACS-CS Iwasaki gauge configurations with 2 + 1 flavors of dynamical clover light quarks. The light quark masses are almost physical (pion mass ˜ 156(7) MeV). The interquark potential with finite quark masses are defined through the equal-time Bethe-Salpeter amplitude. We solve the non-relativistic Schrodinger equation with resulting charmonium potentials as theoretical inputs.

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