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Bottomonium resonances from lattice QCD static-static-light-light potentials

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We study $I = 0$ quarkonium resonances decaying into pairs of heavy-light mesons using static-static-light-light potentials from lattice QCD. To this end, we solve a coupled channel Schrödinger equation with a confined quarkonium channel and channels with a heavy-light meson pair to compute phase shifts and t-matrix poles for the lightest decay channel. Additionally, we study the quark composition of the observed states in terms of quarkonium- and meson-meson-composition. We find results for S-, P-, D- and F-wave-states to discuss in the context of corresponding experimental results, in particular for $\Upsilon(10753)$ and $\Upsilon(10860)$.

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