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Hyperfine splittings of heavy quarkonium hybrids

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The structure of of heavy quarkonium hybrids at leading order in the framework of the Born-Oppenheimer Effective Field Theory expansion is determined by two potentials.
We estimate those potentials by interpolating between the known short distance behavior, obtained from a lattice calculation of the lower lying charmonium hybrid multiplets, and the long distance behavior calculated in the QCD Effective String Theory. Both behaviorurs depend, at leading order, by two parameters.
This allows us to predict the hyperfine splitting both of bottomonium hybrids and of higher multiplets of charmonium hybrids and compare with other approaches.

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