

## Investigation of a $b\bar{b}ud$ tetraquark resonance with $I(J^P) = 0(1^-)$ using lattice QCD static potentials

We explore the existence of tetraquark resonances with lattice QCD potentials computed for a static  $b\bar{b}$  pair in the presence of two light quarks  $ud$ . We use the Born-Oppenheimer approximation and an extension of the emergent wave method, where effects of the heavy quark spins are included via the mass difference of the  $B$  and the  $B^*$  meson. Focus is given on a resonance with isospin  $I = 0$  and relative angular momentum  $L=1$  of the heavy quarks  $b\bar{b}$ .

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