WIDG

Wright Laboratory

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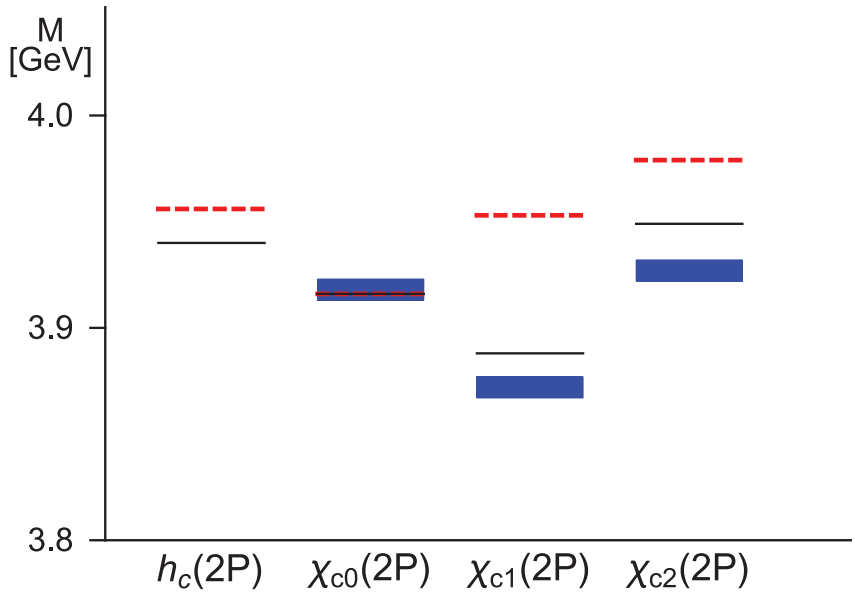
Exotic meson spectroscopy



I will present my latest results on Exotic Meson Spectroscopy. In particular, I will discuss a coupled-channel model for heavy quarkonium spectroscopy , based on the Unquenched Quark Model (UQM) formalism with some modifications. The previous model was used to calculate the masses of χc(2P) and χb(3P) states with threshold corrections. According to my results, the χc(2P) states can be interpreted as the superposition of quarkonium and meson-meson molecular-type components, χb(3P) states as almost pure bottomonia.

I will also discuss the possible existence of fully-heavy tetraquarks. In particular, I will show the results of a calculation of the ground state energy of the $bb\bar{b}\bar{b}$ tetraquark, where b is a bottom quark, both in a non relativistic quark model and in a relativized quark-diquark model. My results support the existence of a $bb\bar{b}\bar{b}$ tetraquark, with a mass of 18.72 – 18.75 GeV.

Cookies will be served at the talk. Please feel free to bring your own drink.

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