

## عنوان مقاله:

A new method for the  $\Omega_{ccb}$  baryon spectroscopy in the nonrelativistic quark model: ansatz approach

## محل انتشار:

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## خلاصه مقاله:

Triply heavy  $\Omega_{ccb}$  baryon is considerable theoretical interest in a baryonic analogue of heavy quarkonium because of the color-singlet bound state of three heavy quark (c, b) combination inside. In this paper, we will discuss  $\Omega_{ccb}$  baryon in the nonrelativistic quark model based on the ansatz approach in Hypercentral Constituent Quark Model. The masses of the ground and excited states of the  $\Omega_{ccb}$  baryon are computed. The hypercentral potential is regarded as a combination of the color Coulomb plus linear confining term and the six-dimensional harmonic oscillator potential in this work. Also, we added the first order correction and the spin-dependent part to the hypercentral potential. The Regge trajectories has been plotted for this baryon and a detailed comparison with previous theoretical calculations is given. Further, using the computed spectroscopic data, the magnetic moments are determined for the .ground state based on the nonrelativistic Hypercentral Constituent Quark Model

## کلمات کلیدی:

Triply Heavy Baryon, Hypercentral Constituent Quark Model, Regge Trajectories, Magnetic moment

## لینک ثابت مقاله در پایگاه سیویلیکا:

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