

Mass Spectra of Ξ and Ω Baryons using hypercentral Constituent Quark Model

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Hadron mass spectra have been a topic of investigation since long so as to explore the unknown degrees of freedom of quarks inside a composite system. The non-relativistic approach backed by constituent quark model alongwith hypercentral potential term has been used to obtain a number of excited resonance masses for light, strange baryons. The Ξ and Ω baryons are known with very little information with Particle Data Group. The hypercentral Constituent Quark Model with corrections of order $\frac{1}{m^2}$ to the spin-dependent term incorporated with linear confining term has been used to obtain mass spectra. The results are plotted to observe the linear curve of Regge Trajectories as well. The study is aimed at upcoming experiments particularly PANDA and others namely BESIII that shall look for strange resonances.

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