

The Heavy baryon masses and Spin-Isospin Dependence

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Heavy flavour baryons containing one charm (beauty) quark with light flavour combinations are studied using the hypercentral approach. The considered potential is a combination of Coulombic, linear confining and harmonic oscillator terms. An improved form of the hyperfine interaction and isospin dependent quark potential is introduced. The ground state masses (and) of heavy baryons are computed. Also the magnetic moments of heavy baryons with using the effective mass of the confined quarks are computed. The obtained results are very close to the ones obtained in experiments or in the other works.

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