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Mass spectra and decay properties of $\Xi_b^{'-}$ baryon

Thursday, 7 October 2021 18:30 (5 minutes)

Mass spectrum, magnetic moment and decay properties of singly heavy strange bottom baryon ($\Xi_b^{'-}$) have been studied in this article. Hypercentral quark constituent model (hCQM), a non-relativistic approach, has been utilised to predict the masses of radial and orbital excited states of $\Xi_b^{'-}$ baryon, employing color Coulomb plus screened potential as confining potential to describe constituent quark interaction. The $\Xi_b^{'-}$ baryon contains two light quarks (d and s) and one heavy quark (b). The magnetic moment of $\Xi_b^{'-}$ baryon is calculated by sandwiching the spin-flavour wave function operating by magnetic moment operator and decay properties are calculated in Heavy Hadron Chiral Perturbation Theory (HHChPT).

Is this abstract from experiment?

No

Name of experiment and experimental site

NA

Is the speaker for that presentation defined?

Yes

Details

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Internet talk

Yes

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