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Study of light baryons

Wednesday 25 August 2021 17:00 (25 minutes)

Hypercentral Constituent Quark Model has been exploited to obtain the radial and orbital resonance masses of light baryons. The confining term of the potential is chosen as linear for the present study. The obtained results are compared with the available experimental data as well as other phenomenological and theoretical models, however the strange quark baryons Ξ and Ω are least observed in experiments so far. The calculated results range for all possible spin-parity assignment for S-state to F-state. The magnetic moments have been obtained through effective mass formalism. Also, few decay widths for radiative decay have been observed to be in accordance with the PDG data. The upcoming experimental facilities may provide with new information to analyze the model in all aspects.

Is this abstract from experiment?

No

Name of experiment and experimental site

NA

Is the speaker for that presentation defined?

Yes

Internet talk

Yes

Details

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