

Structure of excited charmed baryons studied by pion emission decays

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We investigate the decays of the charmed baryons aiming at the systematic understanding of hadron internal structures based on the quark model by paying attention to heavy quark symmetry. We evaluate the decay widths and branching ratio for the pion emission for the known excited Λ_{cb} baryons. We find an interesting selection rule for the decays depending on their internal structure.

We find that pion emission processes, which will be studied in future J-PARC experiments, provide us information on the structure of heavy quark systems.

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