

Pentaquark picture for singly heavy baryons based on a chiral model

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Recently, a novel pentaquark picture ($Qq\bar{q}\bar{q}q$) in addition to the conventional three-quark one (Qqq) for describing the Roper-like singly heavy baryons such as $\Lambda_c(2765)$ and $\Xi_c(2970)$ has been invented, based on a chiral model. In this talk, I review roles of chiral symmetry and the $U(1)_A$ axial anomaly for those two states, and present our prediction of the existence of a negative-parity and 5-quark dominant Λ_c baryon.

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