

Contribution ID: 179 Type: Poster

Renormalization of the baryon axial vector current in large-N_c

The baryon axialvector current is computed at one-loop order in heavy baryon chiral perturbation theory in the large-N_c limit, where N_c is the number of colors. Loop graphs with octet and decuplet intermediate states cancel to various orders in N_c as a consequence of the large-N_c spin-flavor symmetry of QCD baryons. We present a preliminary study of the convergence of the chiral expansion with $1/N_c$ corrections in the case of $g_A = N_c = 3$.

Primary author: Dr HERNANDEZ-RUIZ, Maria de los Angeles (San Luis Potosi Aut. University)

Presenter: Dr HERNANDEZ-RUIZ, Maria de los Angeles (San Luis Potosi Aut. University)

Track Classification: 04 - Hadronic Structure, Parton Distributions, soft QCD, Spectroscopy