

Abstract Submitted
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Octet Baryon Magnetic Moments from QCD Sum Rules¹ LAI WANG, FRANK LEE, George Washington University — We report results on the magnetic moments of octet baryons using the method of QCD sum rules. Three sum rules from three independent tensor structures are derived for each member in the octet (p , n , Λ , Σ^+ , Σ^0 , Σ^- , Ξ^0 , and Ξ^-) using generalized interpolating fields. They are analyzed in conjunction with the corresponding mass sum rules. The convergence of each sum rule is studied, taking into account transitions in the intermediate states. Individual u, d and s quark contributions to the magnetic moment are also isolated. The results are compared to previous calculations and experiment.

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