Abstract Submitted
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N to Delta Transitions from QCD Sum Rules LAI WANG, FRANK LEE, George Washington University — We present a calculation of the N to Δ electromagnetic transition amplitudes from the method of QCD Sum Rules. A complete set of QCD sum rules is derived using the external field method and generalized interpolating fields for the entire family of transitions from baryon octet to decuplet. For each transition, thirteen sum rules are constructed from thirteen independent tensor structures. They are analyzed by a Monte-carlo procedure. Valid sum rules are identified from which the magnetic dipole G_{M1} and the electric quadrupole G_{E2} are determined. The results are compared with calculations from other models and experiment from JLab and other accelerators.

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