irreducible three quark operators for LQCD

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Hadron distribution amplitudes are important for studying exclusive and semiexclusive processes in QCD. The moments of nucleon distribution amplitudes are related to matrix elements of three quark operators evaluated between the vacuum and a nucleon state. Such matrix elements can be computed nonperturbatively in lattice QCD. However, the three-quark operators need to be renormalized. For that purpose we present a basis of operators transforming irreducibly under the double cover of the hypercubic group and give an outlook on the nonperturbative calculation of renormalization and mixing coefficients.