

Green Functions of Chiral Currents within OPE

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We present new results on contributions of the QCD condensates to the two-point and the three-point Green functions of chiral currents, calculated within the means of the operator product expansion (OPE). Further, for the Green functions of the odd-intrinsic parity sector of QCD, we show up-to-date knowledge of behavior of the matching between the calculations performed in the resonance chiral theory and OPE. This matching, however, as complicated as it is, can lead to important constraints on the coupling constants of the resonance Lagrangian, relevant in the odd-sector of QCD. We also discuss in detail some phenomenological applications of our study, such as the connection to the rare decays of mesons, which helps to subject the unknown couplings to significant restrictions.

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Primary author: Mr KADAVY, Tomas (Charles University)

Co-authors: Dr NOVOTNY, Jiri (Charles University); Dr KAMPF, Karol (Charles University)

Presenter: Mr KADAVY, Tomas (Charles University)

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