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Non-perturbative renormalization of tensor bilinears in Schrodinger Functional schemes

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We present preliminary results for the non-perturbative renormalization of the tensor current in QCD for $N_f = 0, 2$, as well as an ongoing extension to $N_f = 2 + 1$. The renormalization group running is computed in the continuum limit for a wide range of scales, using various Schrodinger Functional (SF) schemes and finite volume recursive techniques. In all these schemes, we have also computed the matching factor to $\overline{\text{MS}}$ and RI-MOM, which allows for a NLO matching to the RGI operator at high energies. An example application of the results is the renormalization and matching of the tensor currents entering the effective Hamiltonian for $b \rightarrow s$ transitions.

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