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A dynamical study of the chirally rotated Schrödinger functional in QCD

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The chirally rotated Schrödinger functional for Wilson quarks allows for finite-volume, mass-independent renormalization schemes compatible with automatic O(a)-improvement. So far, in QCD, the setup has only been studied in the quenched approximation. Here we present first results for Nf=2 dynamical flavors for several renormalization factors of quark bilinears. We discuss how such renormalization factors can be easily obtained from simple ratios of two-point functions, and show how automatic O(a)-improvement is at work. We then compare our results with previous Schrödinger functional determinations.

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