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## **Non perturbative renormalization and running of Delta F=2 four-fermion operators in the SF scheme.**

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We present preliminary results of a non-perturbative study of the scale-dependent renormalization constants of a complete basis of Delta F=2 parity-odd four-fermion operators that enter the computation of hadronic B-parameters within the SM and beyond.

We consider non-perturbatively  $O(a)$  improved Wilson fermions and our gauge configurations contain two flavors of massless sea quarks.

The mixing pattern of these operators is the same as for a regularization that preserves chiral symmetry, in particular there is a “physical” mixing between some of the operators.

The renormalization group running matrix is computed in the continuum limit for a family of Schrödinger Functional (SF) schemes through finite volume recursive techniques. We compute non-perturbatively the relation between the renormalization group invariant operators and their counterparts renormalized in the SF at a low energy scale and we

provide non-perturbative estimates for the matching matrix between the lattice regularized theory and the various SF schemes.

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