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## Preliminary study of the non-perturbative renormalization of $K \rightarrow \pi$ ( $\pi$ ) operators, with $N_f=2+1$ Domain Wall fermions

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At the leading order of the OPE, they are ten 4-quark operators which contribute to the  $\Delta S=1$  effective Hamiltonian.

The mixing pattern of these operators under renormalization is governed by their chiral properties. Thus it is crucial to perform this computation with fermions which preserve (or almost preserve) chiral symmetry, such as Domain Wall fermions.

We present here our strategy to compute the relevant renormalization matrix following the Rome-Southampton method, with point and volume sources.

In particular we will show how we can deal with the potentially dangerous eye contractions.

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talk

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