

Lattice 2024



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Chiral Lagrangian for Karsten-Wilczek Minimally Doubled Fermion

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Lattice chiral perturbation theory is constructed for the Karsten-Wilczek (KW) minimally doubled fermion action. Symanzik expansion based on the symmetries of the lattice KW action and subsequent spurion analysis have been carried out. This led to the chiral Lagrangian which can be arranged in powers of quark masses and lattice spacing.

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