Pseudoscalar flavor-singlet physics with staggered fermions

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Accurately calculating the mass of flavor-singlet meson states from numerical lattice simulations is an important milestone for lattice QCD. Careful measurement of the full pseudoscalar flavor-singlet propagator is also a crucial step in understanding the dynamics of the fermion sea on the lattice, in particular for potentially non-trivial formulations such as with 2+1-flavor staggered fermions. We report on progress in the staggered fermion flavor-singlet project with quenched and full 2+1 staggered fermions, including the status of long time-series ensembles.