

$K\pi$ scattering and excited meson spectroscopy using the Stochastic LapH method

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Elastic $I = 1/2$, s - and p -wave $K\pi$ scattering amplitudes are simultaneously calculated using a Lüscher style analysis on a single ensemble of dynamical Wilson-clover fermions at $m_\pi \sim 230\text{MeV}$. Partial wave mixing due the reduced rotational symmetries of the finite volume is included up to $\ell = 2$.

We also present finite-volume QCD spectra on two large anisotropic lattices ($32^3 \times 256$, $24^3 \times 128$) with $m_\pi \sim 230, 390\text{MeV}$.

In each symmetry channel, a large basis of one and two hadron interpolating operators is employed with all-to-all quark propagation treated using the stochastic LapH method.

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