

Lattice 2024



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Spectral densities from Euclidean-time lattice correlation functions

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In quantum field theories, spectral densities are directly related to relevant physical observables. In Lattice QCD, their non-perturbative extraction from first principles requires the Inverse Laplace transform of Euclidean-time correlation functions, a notorious ill-posed problem. In this talk we present a new strategy to perform this inversion both in the continuum and on the lattice, also suitable for smeared spectral densities.

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