Heavy meson light-cone distribution amplitudes from lattice QCD at the continuum Limit

Heavy meson light-cone distribution amplitudes (LCDAs) are essential nonperturbative quantities that characterize the internal dynamics of heavy mesons. They play a crucial role in the theoretical description of heavy meson (B or D) exclusive decays. However, due to the intrinsic challenges of nonperturbative QCD, first-principles calculations of heavy meson LCDAs have been notoriously difficult, with most studies relying on phenomenological models. We proposed a sequential effective theory approach to compute heavy meson LCDAs from first principles using lattice QCD. In this talk, we will present our latest results for heavy meson LCDAs obtained from lattice QCD calculations extrapolated to the continuum limit.

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