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## Structure-dependent form factors in radiative leptonic decays with Domain Wall fermions

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In the region of hard photon energies, radiative leptonic decays represent important probes of the internal structure of hadrons.

Moreover, radiative decays can provide independent determinations of Cabibbo-Kobayashi-Maskawa matrix elements with respect to purely leptonic or semileptonic channels.

Prospects for a precise determination of leptonic decay rates with emission of a hard photon are particularly interesting, especially for the decays of heavy mesons for which currently only model-dependent predictions, based on QCD factorization and sum rules, are available to compare with existing experimental data.

We present a non-perturbative lattice calculation of the structure-dependent form factors which contribute to the amplitudes for the radiative decays  $H \rightarrow \ell\nu_\ell\gamma$ , where  $H$  is a charged pseudoscalar meson, using the Domain Wall formulation of lattice fermions.

With moderate statistics, thanks to the use of a sine-cardinal-reconstruction technique and improved estimators, we are able to provide rather precise, first-principles results for the form factors in the full kinematical (photon-energy) range for both light and heavy mesons.

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