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## Virtual Photon Emission in Leptonic Decays of Pseudoscalar Mesons

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We study, with lattice QCD, the leptonic decays of pseudoscalar mesons of the type  $P^+ \rightarrow l^+ \nu_l l'^+ l'^-$ . These processes are mediated by the emission of a virtual photon which also interacts with the hadronic structure of the pseudoscalar meson  $P^+$ , giving rise to relevant structure-dependent corrections. They are very suppressed processes, which thus provide an excellent test for the Standard Model and represent an useful ground for the search of New Physics. Particularly interesting is the case of heavy mesons like the  $D$  and the  $B$ , for which Chiral Perturbation Theory (ChPT) does not apply. We present the strategy developed for the lattice calculation of all the relevant structure-dependent form factors and separate their contribution to the amplitude from the point-like structure-independent term. We study the kinematic limitation due to the presence of internal lighter states appearing in the Euclidean correlation function, together with some strategies to overcome this issue. We also present our preliminary results and compare them with experimental data. For processes to which ChPT applies we also compare our results with the ChPT predictions.

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