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E5: Pion and Kaon form factors using twisted-mass fermions

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We present a calculation of the pion and kaon form factors and generalized form factors using matrix elements of local operators. We use an ensemble of two degenerate light, a strange and a charm quark (Nf=2+1+1) of maximally twisted mass fermions with clover improvement. The quark masses are chosen so that they reproduce a pion mass of about 260 MeV, and a kaon mass of 530 MeV. The lattice spacing of the ensemble is 0.093 fm and the lattice has a spatial extent of 3 fm. We analyze several values of the source-sink time separation within the range of 1.12-2.23 fm to study and eliminate excited-states contributions. We compare the results for the pion and kaon to assess the level of the SU(3) flavor symmetry breaking.

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