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# Exploring the Electromagnetic Structure of the Charged Pion and Kaon

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In Quantum Chromodynamics (QCD), the elastic form factor of the charged pion is unique in that it can be rigorously calculated perturbatively in the limit of asymptotically large momentum transfer. However, the lack of a "free pion" target makes experimental studies of this quantity challenging, and one must make measurements using the virtual pion cloud of the nucleon via pion electroproduction. The kaon is a similar object, and experimental measurements of the ratio of the kaon and pion form factors versus $Q^2$ are of significant interest.

This talk will describe the pion and kaon form factor program at Jefferson Lab, where experiments at 6 GeV have provided precise measurements of the pion form factor at moderate momentum transfers. Upcoming measurements using the upgraded 12 GeV beam and Hall C facilities will allow us to extend these measurements to even larger momentum transfer.

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