

Abstract Submitted  
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**Exploring the potential for studies of the electromagnetic structure of the kaon at 12 GeV JLab**<sup>1</sup> ALEXANDER DITTMANN, University of Illinois, Urbana Champaign — The measurement of form factors plays a pivotal role in the study of hadron structure. Pions and kaons are the simplest strongly bound quark-gluon systems in nature. Pions are the lightest QCD quark systems, having a key role in our understanding of the dynamic generation of mass. Kaons also contain strangeness. The pion form factor has been measured over a wide range of  $Q^2$ . The range of kaon form factor data beyond the dynamic range reachable with elastic scattering is much smaller. A key issue in reaching higher values of  $Q^2$  is the need to quantify the role of the kaon pole in order to extract the form factor from kaon electroproduction data. Understanding the relative contribution of the longitudinal cross section and its kinematic dependencies is important in this effort. Arguably the best way to access data in the higher  $Q^2$  regime is with dedicated kaon experiments at 12GeV Jlab. However, information can be gained from existing data. In this talk I will discuss the analysis of existing data from exclusive and semi-inclusive scattering experiments optimized for pions which contained kaons in their acceptance. Preliminary kaon cross sections will be shown and an outlook for kaon form factor measurements at 12GeV JLab will be discussed.

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