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To Understand the Mechanisms of Hadro Production in t-channel Dependence DANIEL PUENTES, BRIAN RAUE, LEI GUO, SHANKAR AD-HIKARI, MARIA MANRIQUE, Florida Intl Univ — Studies of hadron photoproduction in the past few decades have yielded tremendous amounts of information. The wealth of data allows us to understand which exchange mechanisms result in production of specific hadrons. This can be investigated by studying how, at low momentum transfer, the t-dependence of the differential cross section changes with the photon beam energy. Studying the t-dependence allows us to probe into the nature of the different exchange particles at different energies. Multiple reactions are being studied to better understand how the t-dependence varies among different hadron production reactions. Some reactions being studied include $\gamma p \to K^+\Sigma^0$ and $\gamma p \to p\omega$ for a preliminary investigation.

Daniel Puentes Florida Intl Univ

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