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 ϕ -meson Photoproduction By Using a Beam of Linearly-Polarized

Photons¹ JULIAN SALAMANCA, PHILIP COLE, Idaho State University — The observables afforded by linearly-polarized photons provide the necessary means towards delineating the contributions of the various hadronic processes, which give rise to vector meson photoproduction. And in particular, We shall describe how ϕ meson production affords an incisive tool for exploring the nature of the parity exchange at threshold energies, the strangeness content of proton, as well as extracting signatures for the violation of Okubo-Zweig-Iizuka observation (OZI rule). Our goal will be measure the $\vec{\gamma}p \to \phi p$ reaction, with $\phi \to K^+K^-$, in the photon energy range of 1.7G to 2.1 GeV by using the Coherent Linear Bremsstrahlung Facility in Hall B of Jefferson Laboratory (Newport News, VA). The data were collected during the g8b run in the summer of 2005.

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