Abstract Submitted
for the DNP16 Meeting of
The American Physical Society

K-Long Facility for JLab and its Scientific Potential[1] IGOR STRAKOVSKY, George Washington Univ, GLUEX COLLABORATION — Our main interest in creating a secondary high-quality KL beam is to investigate hyperon spectroscopy through both formation and production processes. We propose to study two body and quasi-two-body reactions induced by the KL beam on the proton target. The experiment should measure both differential cross sections and self-analyzed polarizations of the produced Lambda-, Sigma-, and Xi-hyperons using the GlueX setting at the Jefferson Lab Hall D. New data will greatly constrain partial-wave analysis and reduce model-dependent uncertainties in the extraction of strange resonance properties, providing a new benchmark for comparisons with QCD-inspired models and LQCD calculations. The measurements will span c.m. \cos\theta from -0.95 to 0.95 in c.m. range above W = 1490 MeV.

[1]the U. S. Department of Energy, Office of Science, Office of Nuclear Physics, under Award Number DESC0014133

Igor Strakovsky
George Washington Univ

Date submitted: 21 Jun 2016 Electronic form version 1.4