Meson Photoporoduction Experiments with CLAS

Eugene Pasyuk

Thomas Jefferson National Accelerator Facility, Newport News, VA, U.S.A.

A large part of the experimental program in Hall B of the Jefferson Lab is dedicated to light baryon spectroscopy. Meson photoproduction experiments are essential part of this program. CEBAF Large Acceptance Spectrometer (CLAS) and availability of circularly and linearly polarized tagged photon beams and frozen spin polarized targets provide unique conditions for this type of experiments. This combination of experimental tools gives a remarkable opportunity to measure double polarization observables for different pseudoscalar meson photoproduction processes. For the first time, a complete or nearly complete measurement becomes possible and will facilitate model independent extraction of the reaction amplitude. An overview of the experimental program and its current status together with recent results will be presented.

E-mail:

pasyuk@jlab.org