Search for New Forms of Hadronic Matter in Photoproduction

LUKASZ BLASZCZYK, Florida State University, JEFFERSON CLAS COLLABORATION — Discussion will be given of an upcoming experiment at Jefferson Lab, in Hall B, scheduled for mid 2007. Recent experimental results for gluonic hybrid candidates as well as theoretical predictions suggest photoproduction is ideal in the search for gluonic matter. The CEBAF Large Acceptance Spectrometer (CLAS) detector at Jefferson Lab in Newport News, VA offers an excellent opportunity to study meson spectroscopy at photon beam energies up to 5.7GeV. The g12 HyCLAS experiment will collect the largest set of photoproduction data in meson spectroscopy to date, over an order of magnitude more than previous photoproduction experiments at CLAS. This will lead to substantial yields for the purpose of Partial Wave Analysis.