Light Meson Decays in CLAS and CLAS12

Photo-production experiments with the CEBAF Large Acceptance Spectrometer (CLAS) at the Thomas Jefferson National Laboratory produce data sets with competitive statistics of light mesons. With these data sets, measurements of transition form factors for η , ω , and η' mesons via conversion decays can be performed using the invariant mass distribution of the final state dileptons. Tests of fundamental symmetries and information on the light quark mass difference can be performed using a Dalitz plot analysis of the meson decay. An overview of the first results, from existing CLAS data, and future prospects within the newly upgraded CLAS12 apparatus are given.