

# Search for Hidden-Charm Pentaquark with CLAS12

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LHCb recently announced the discovery of two exotic structures in the  $J/\psi + p$  decay channel, which have been referred to as charmonium-pentaquark states. Resolving between the models and clarifying the nature of the discovered hidden-charm pentaquark peaks, and possibly searching for similar peaks with other quantum numbers, requires further experimental studies. The states were observed in the decay mode  $J/\psi + p$ . Thus, it is natural to expect that these pentaquarks can be produced in the photoproduction process  $\gamma + p \rightarrow P_c \rightarrow J/\psi + p$  where these states will appear as s-channel resonances at photon energy around 10 GeV. The energy and luminosity of the CLAS12 photon beam permit the detailed studies of the production and decay properties of the pentaquark resonances. By this reason the pentaquark search at Jefferson Laboratory looks extremely attractive.