

## Search for $\Phi(1862)$ Pentaquark States

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Following first observations of the possible  $S = +1$  pentaquark state  $\Theta^+(1540)$ , there have been many experiments in various laboratories to verify these results and to search for states which could be associated with other members of the pentaquark antidecuplet. The NA49 collaboration reported observations of narrow  $S = -2$  states with masses about 1860 MeV showing in the  $\Xi\pi$  invariant mass spectra. These states were identified as isospin 3/2 members of the pentaquark antidecuplet, and were named  $\Phi(1862)$ . However, other experiments, some of which were of very high statistics, have failed to reproduce these results. A dedicated experiment has recently been performed at Jefferson Lab using the CLAS detector to search for the  $\Phi(1862)$  state in photoproduction on a deuterium target. A large data sample has been collected and analyzed containing approximately two thousand  $\pi^-\Xi^-$  candidates. After a brief introduction to the subject the CLAS experiment will be described, and the results will be presented during this talk.