

理化学研究所原子核セミナー 2005. 7. 25

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(Ohio University)

題目： High statistics search for Θ^+ in $\gamma + d \rightarrow K^+K^-p(n)$ reaction

* The seminar will be given in *English*.

日時： 2005 年 7 月 25 日 (Mon.) 15:30 -

場所： RIKEN Main Bldg. 2F Seminar Room

Abstract

A signature indicating the existence of the $S=+1$ pentaquark state (Θ^+) has been reported in more than ten experiments in a variety of reactions. On the other hand, there are a number of non-observations, mainly from the e^+e^- collider experiments and other experiments at high-energy facilities. The main criticism for the existence of the Θ^+ is the low statistical significance. None of the positive results show a high significance with sufficient statistics. A new experiment to search for the Θ^+ in the photon-induced production on a deuteron has been pursued using the CLAS detector and the tagged-photon facility at Jefferson Laboratory. The integrated luminosity of the new data is about 10 times greater than the previously published CLAS data on a deuterium target. In this talk, an experimental overview and current analysis results for the $\gamma + d \rightarrow K^+K^-p(n)$ reaction will be presented.

* Host researcher : K. Tanida (RIKEN)

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