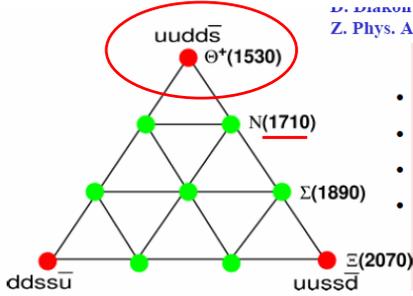


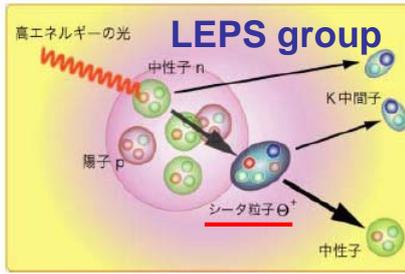
S=+1 Pentaquark Baryonは本物か？

7/1/2005

4/22 実験紹介



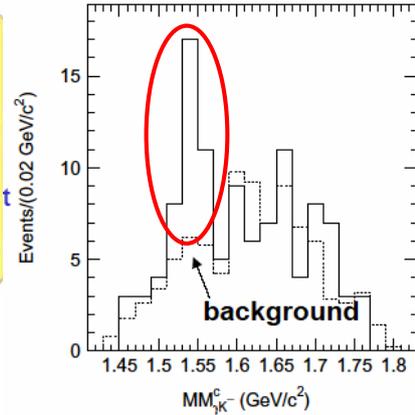
Discovered in 2003



$M = 1.54 \pm 0.01 \text{ MeV}$

$\Gamma < 25 \text{ MeV}$

Gaussian significance 4.6 σ

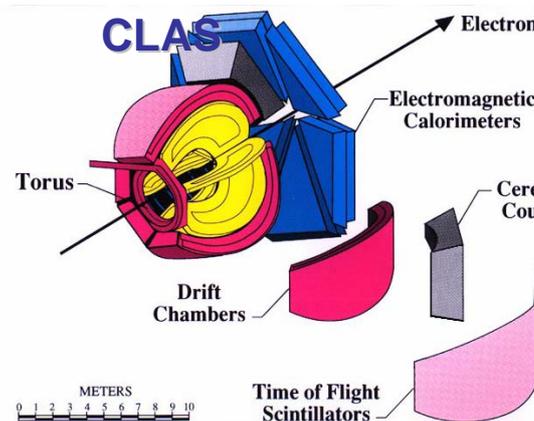
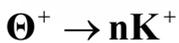
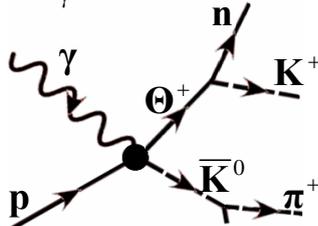


しかし

- 以下の実験(主に高エネルギーの実験)から否定的結果が。。。
 - DELPHI, ALEPH(e^+e^- , 90-200GeV), BABAR, BELLE (e^+e^- , ~10GeV), BES (e^+e^- , 3~4GeV), CDF(pp, 2TeV), HERA-B (ep, ~300GeV), PHENIX(Au+Au), SPHINX (?), COMPASS, E690, FOCUS (p+N)
- 2005年4月
 - 同じタイプ、同程度のエネルギー且つ高統計の実験(CLAS@J-LAB, USA)からも否定的結果が。。。。



$E_\gamma = 1.6 \sim 3.8 \text{ GeV}$



CLAS: $\gamma d \rightarrow K^+ K^- p (n)$

