

Polarization Experiments at COSY with the ANKE Spectrometer

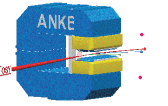
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Experimental Program

Single and Double Polarization Experiments

- $pn \Rightarrow NN$ Interaction
- $NN \rightarrow NN\pi \Rightarrow 3N$ Forces
- $pn \rightarrow (n\Lambda)K^+ \Rightarrow SU(3)$ Breaking



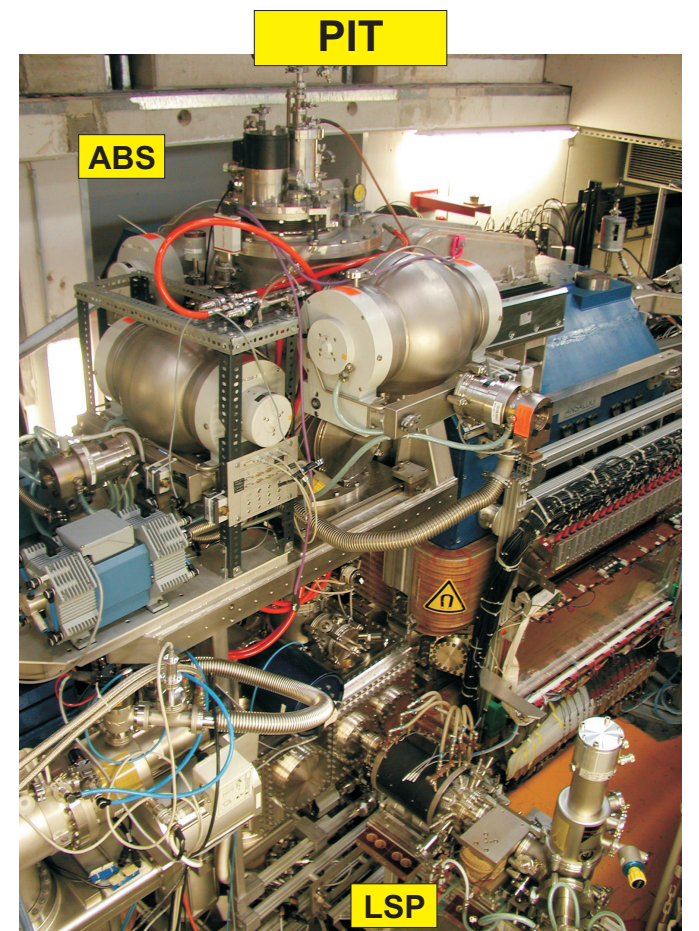
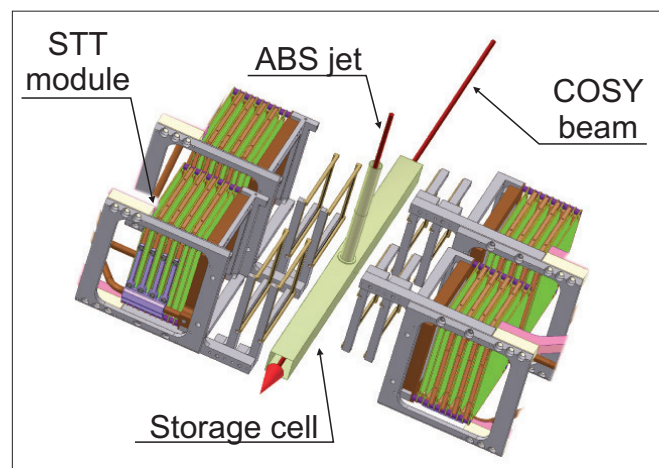
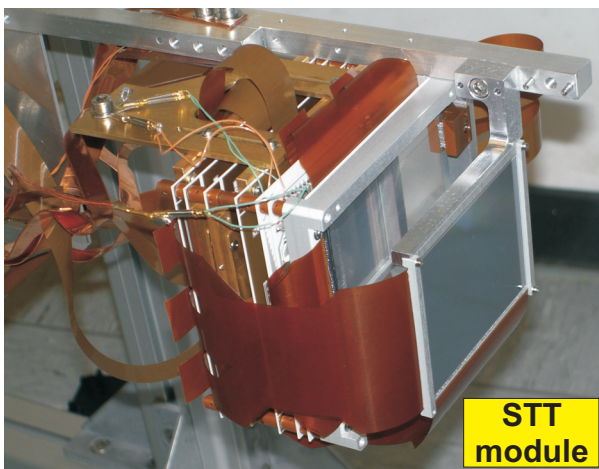
Experimental Tools

Polarized Internal Storage-Cell Target (PIT)

ABS: Atomic Beam Source

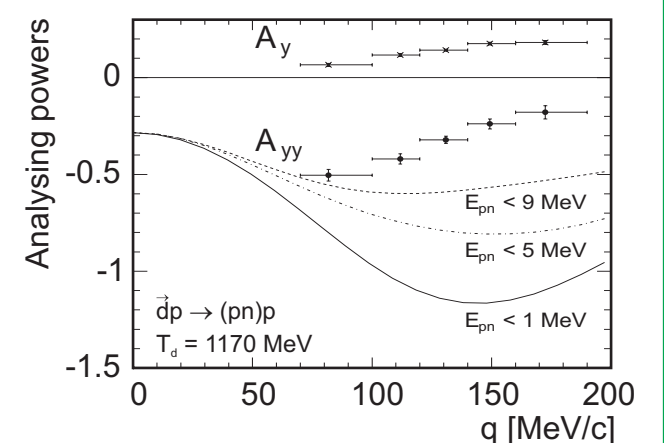
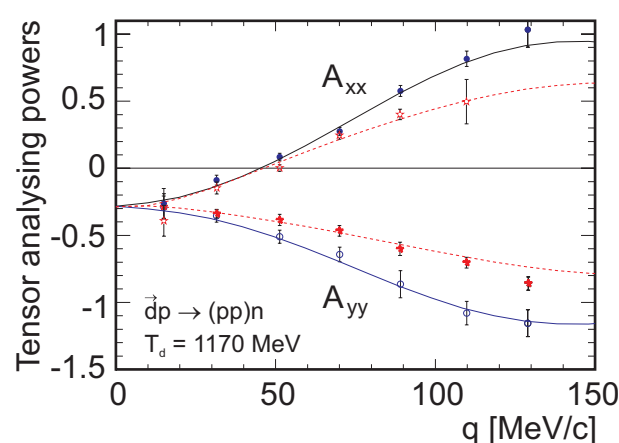
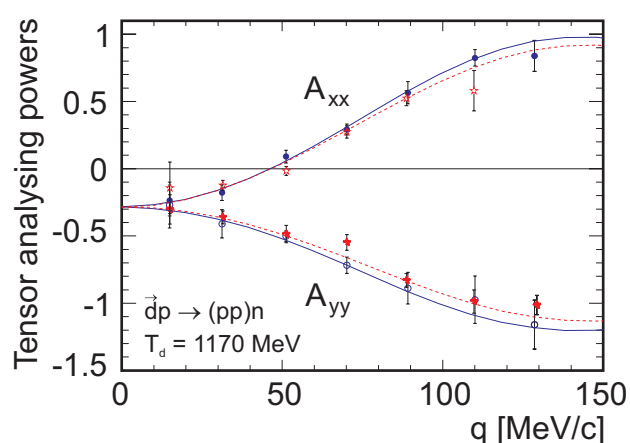
LSP: Lamb-Shift Polarimeter

Silicon Tracking Telescope (STT)



np Spin Physics: first results

Obtain spin-dependent information via measurement of $d\sigma/d\Omega$, A_y , A_{yy} , A_{xx} , C_{yy} , $\dots$, from the reaction $\vec{dp} \rightarrow (2p)n$



"Vector and tensor analysing powers in deuteron-proton breakup reactions at intermediate energies"

submitted to PLB; nucl-ex/0601038