

# Control Logic, Secondary Target and the Germanium Array of the PANDA Hypernuclei Experiment

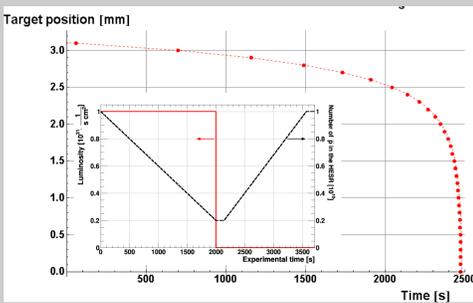
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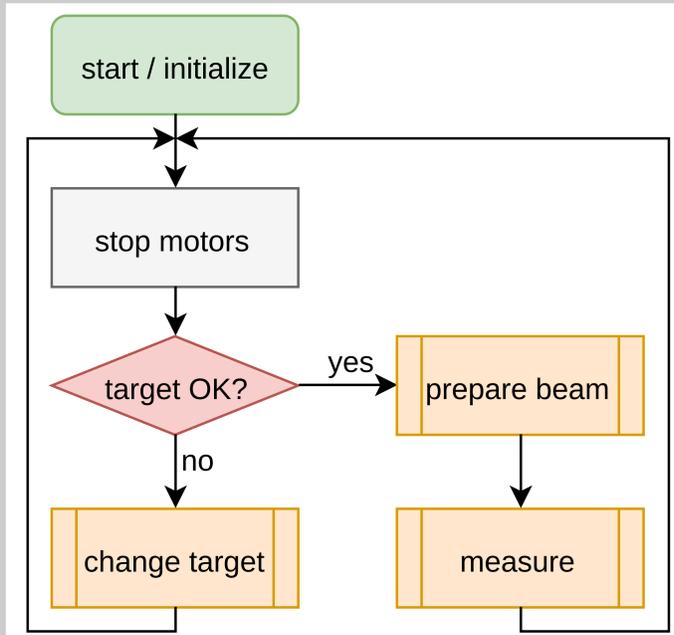
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PANDA DCS			
EPICS			
Magnets	Charged PID	Muon System	Hypernuclei Experiment
Targets	EM Calorimeter	Tracking System	Primary Target
Services	Online systems	Silicon detectors	Secondary Target
			Germanium Detector

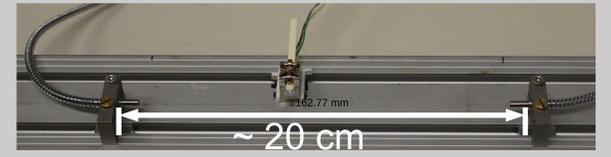
Control logic for the PANDA Experiment



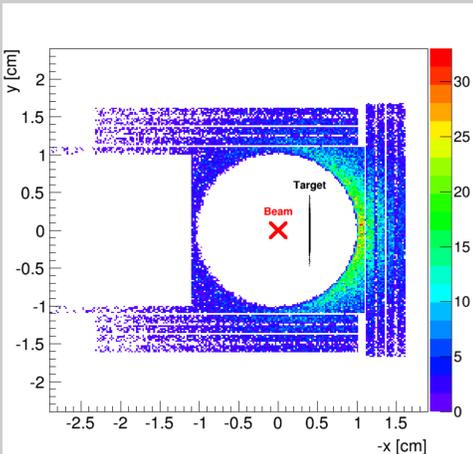
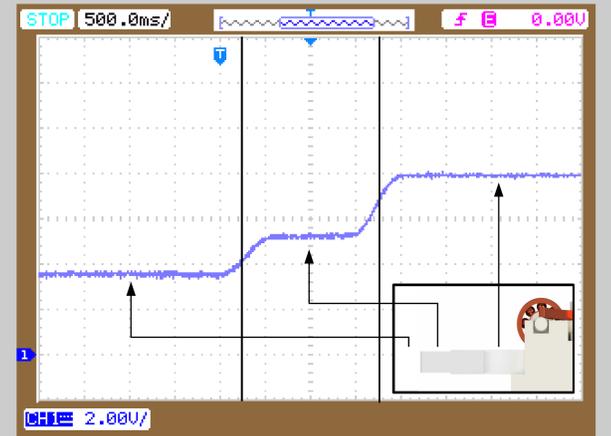
Experiment cycle and primary target offset



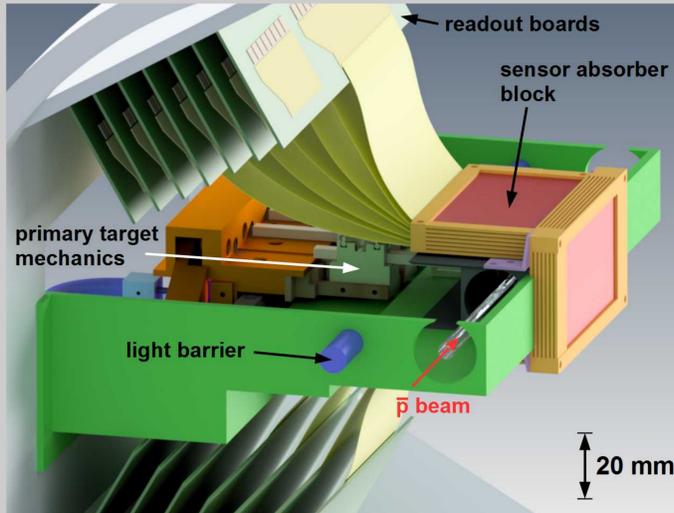
Flow chart of the hypernuclei primary target control



Proof of concept for primary target interlock  
Differing heights distinguishable

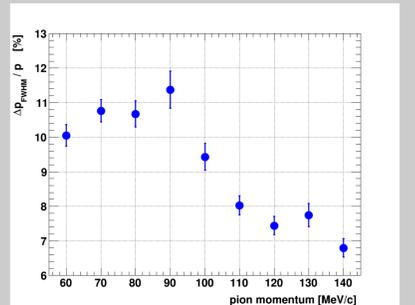


Stopping points of produced  $\Xi^-$   
→ Starting points of deexcitation  $\gamma$  and decay  $\pi$

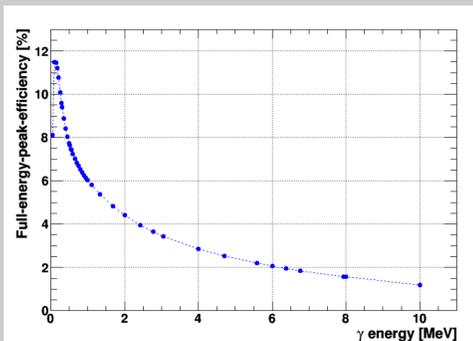
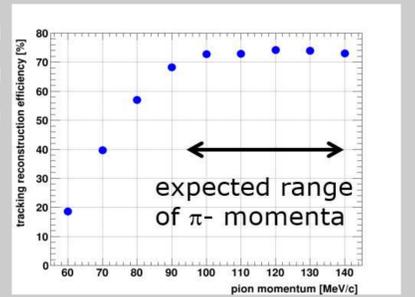


Sketch of the target system with readout electronics

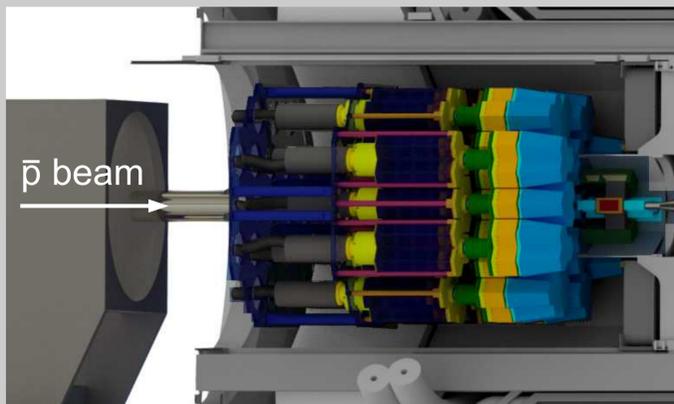
Pion reconstruction efficiency



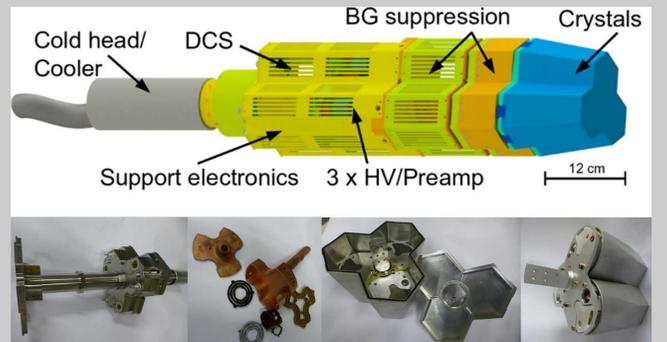
Pion momentum resolution



PANGEA detection efficiency



Integration of the hypernuclei experiment inside the PANDA barrel spectrometer



Highly integrated germanium triple cluster detector commonly developed by PANDA and NuSTAR