

# KRAB

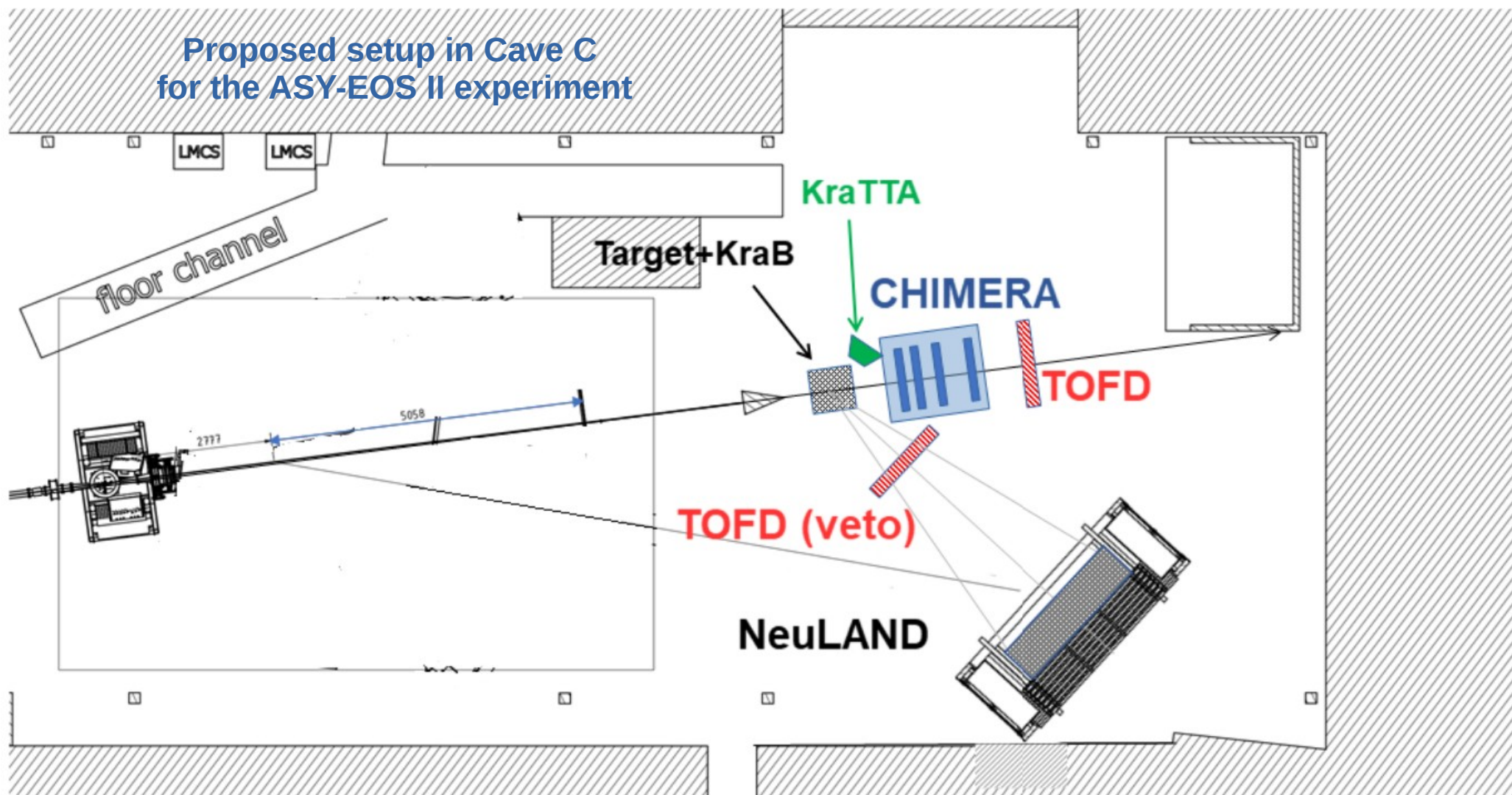


detector for the ASY-EOS II experiment

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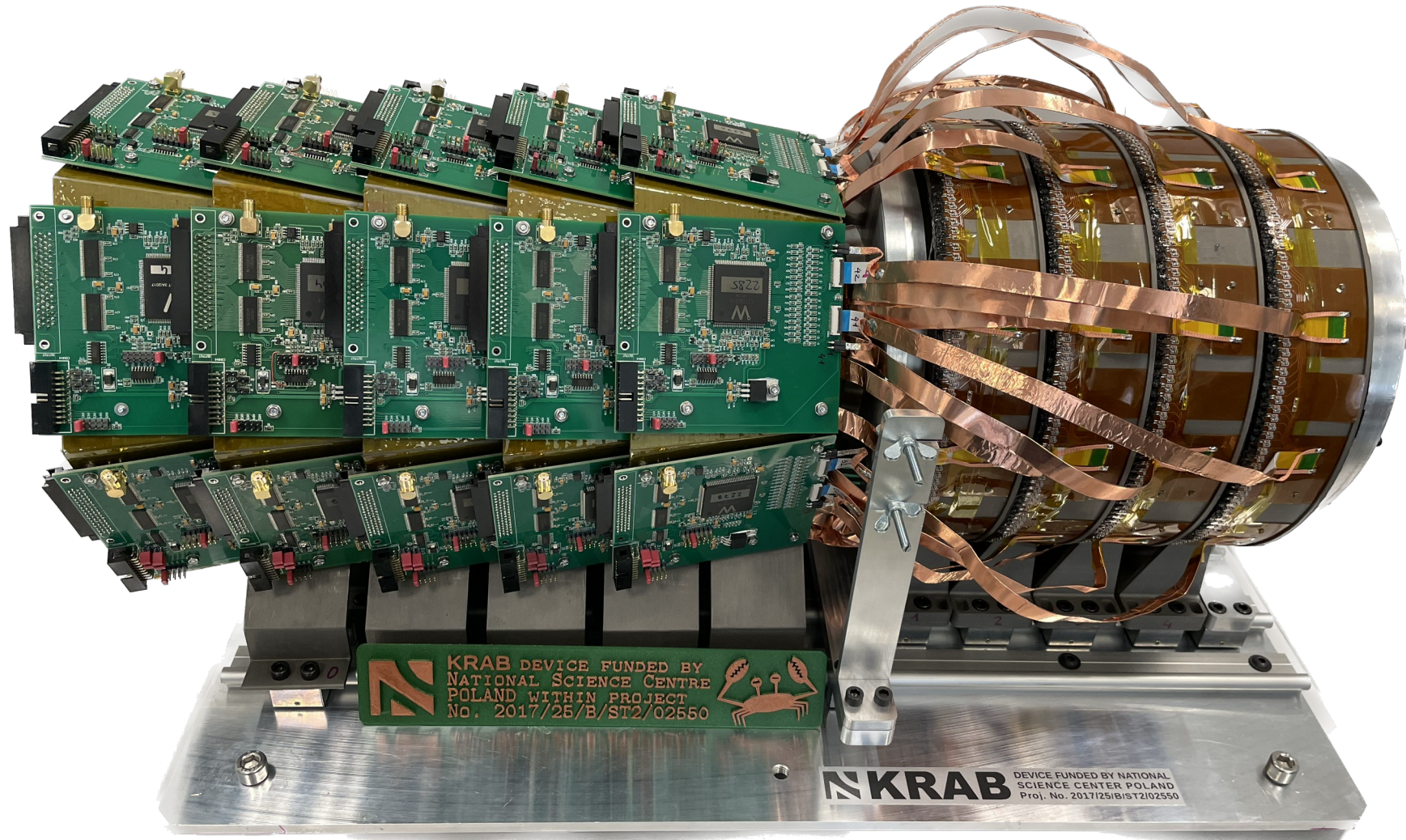
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Proposed setup in Cave C  
for the ASY-EOS II experiment



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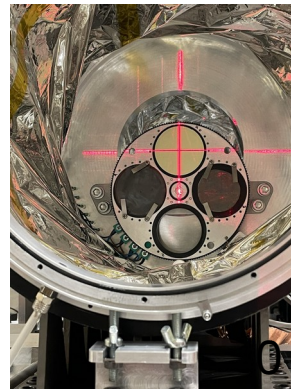
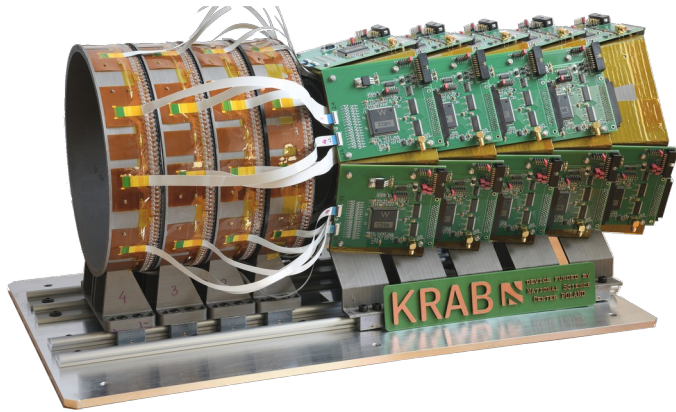
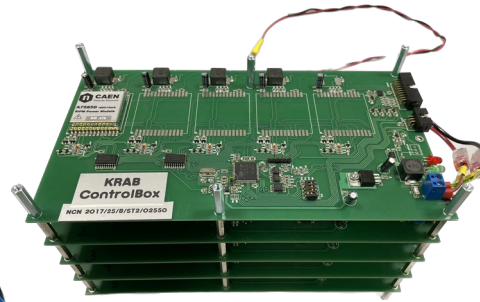
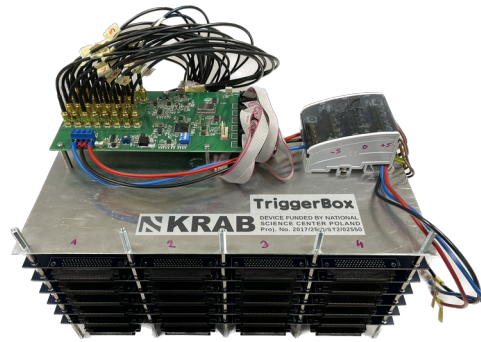
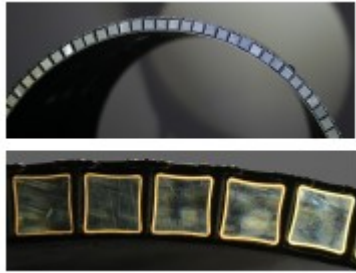
multiplicity trigger, reaction plane and centrality detector  
for the ASYEOS II experiment at GSI/FAIR



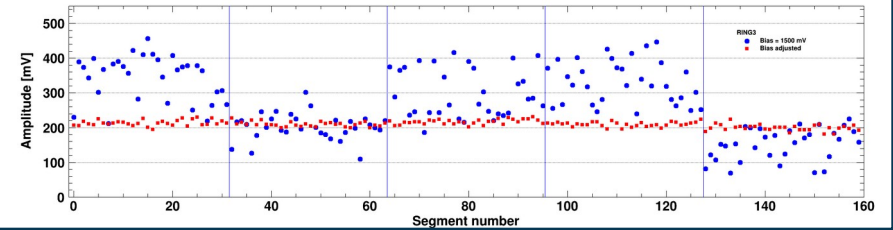
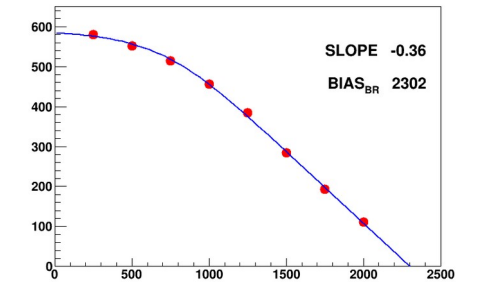
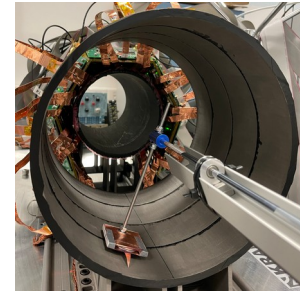
## Main characteristics:

- 3D printed mechanical structure (ABS)
- 5 rings of  $4 \times 4 \text{ mm}^2$  scintillating fibers read out by SiPMs
- $4 \times 160$  segments in forward and 96 in backward ring
- 736 channels
- 32 ch CITIROC 1A ASICs used for signal processing
- broad coverage from  $30^\circ$  to  $165^\circ$
- geometrical efficiency  $\sim 87\%$  (within covered angles)
- $\sim 5\%$  multihit probability (for 1 AGeV Au+Au reaction)
- sufficiently large for radioactive beams and sufficiently small and lightweight not to disturb neutrons
- He sleeve to suppress the  $\delta$ -electron background

# MAIN COMPONENTS OF KRAB SYSTEM

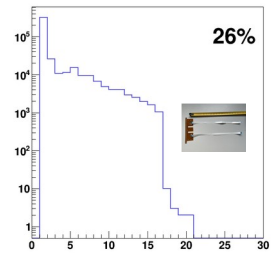


## CALIBRATION

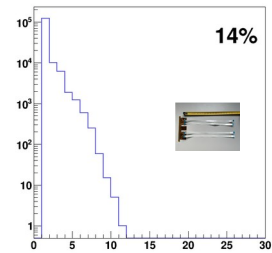


## SOME TEST RESULTS

MULT R0 run 64



MULT R0 run 83



MULT R2 run 83

