DE LA RECHERCHE À L'INDUSTRIE



Forward Tagger Tracker Status Report

F. Sabatié – CEA Saclay



- ☐ Design of FT-Trk
- ☐ Status report
- ☐ A few results from December test

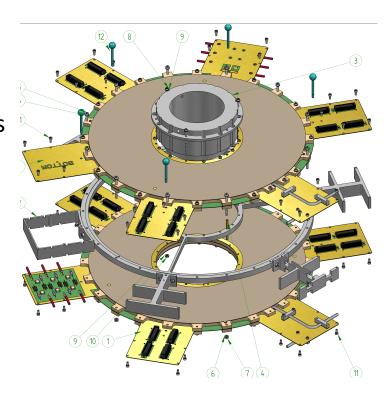
www.cea.fr



Forward Tagger Tracker – Final Design



- Two double-sided (X-Y) Micromegas detectors
- Strip Pattern
 - 560 μm pitch
 - 768 strips per side
 - Resistive technology -> no spark
- Single input and output gas for both side
- Chambers can be taken apart/repaired



- Readout using the same MVT electronics based on Dream ASICs
- ► 1.5m long micro-coax cables

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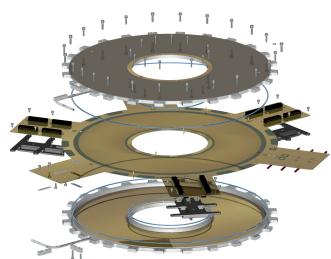
Forward Tagger Tracker – Status Report



- ▶ Detectors 1 & 2 arrived late from CERN (November 2015). One connector was broken on detector 2 ⊗
- Integration at Saclay, very limited checks and sent to JLab almost right away
- Tests of FTT at JLab in December 2015
 - Could not proceed with mechanical integration with "nose" (the part was not machined yet after all)
 - > Discovered issues with gas tightness (corrected locally but ...)



- Decided on some modifications in the design to reinforce the structure using 3D printing elements and to improve the gas tightness
- Shipped FTT back to Saclay
- Building of FTT detector #3 in progress at CERN
 - Expected at Saclay first week of March
 - > Detector 1 & 3 will be main detector
 - > Detector 2 (broken connector) will be spare
 - Possible to remake a spare but not within time/budget for now
- Final delivery at JLab in June (tentatively)

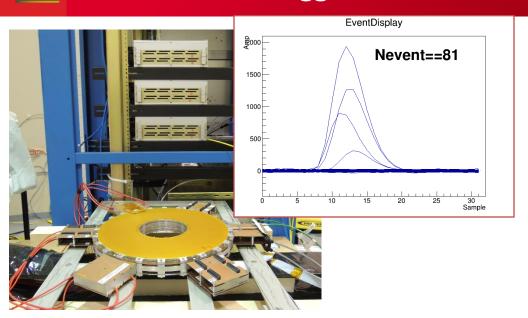


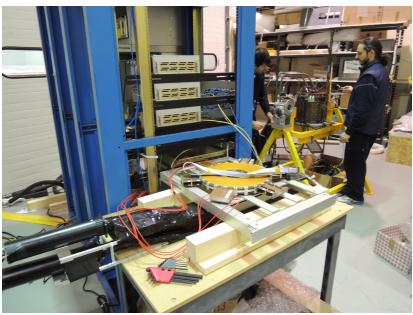
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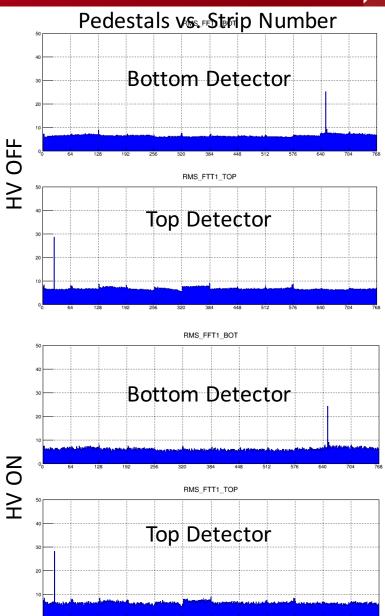


Forward Tagger Tracker – A few pictures & results









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