

Detector CATs and DSS activities at Saclay

Ch.T for the IRFU Detectors and Infrastructure teams

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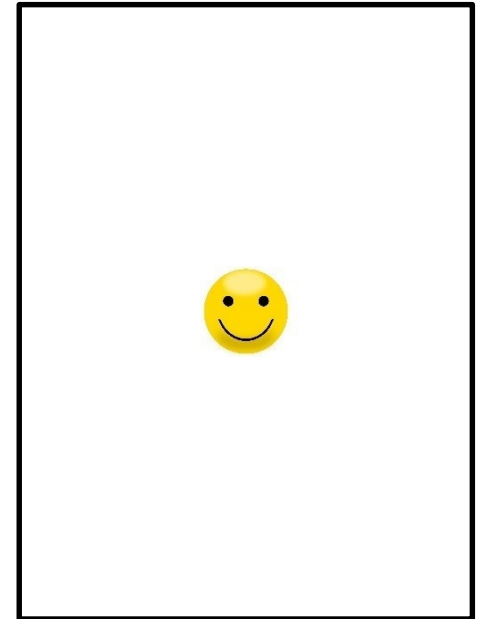
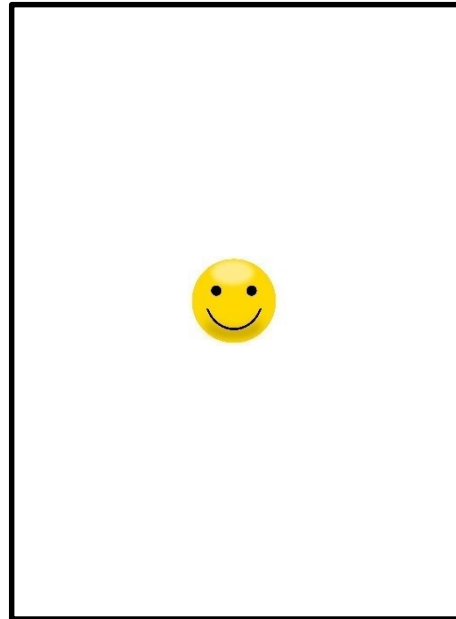
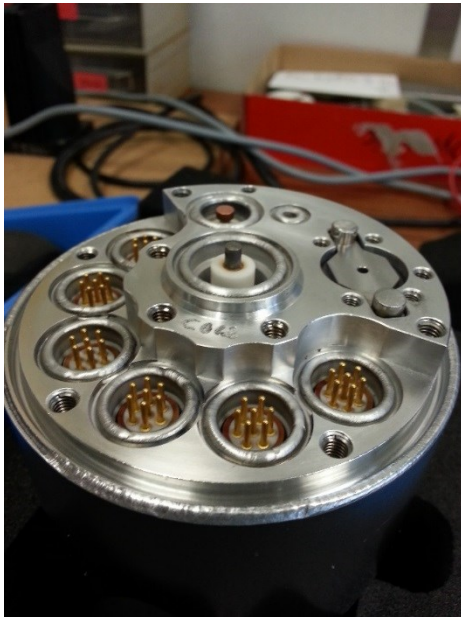
T. Joannem, A. Lotode, R. Touzery, Ch. Walter

17th AGATA Week – October 3-7 2016

CATs performed at Saclay:

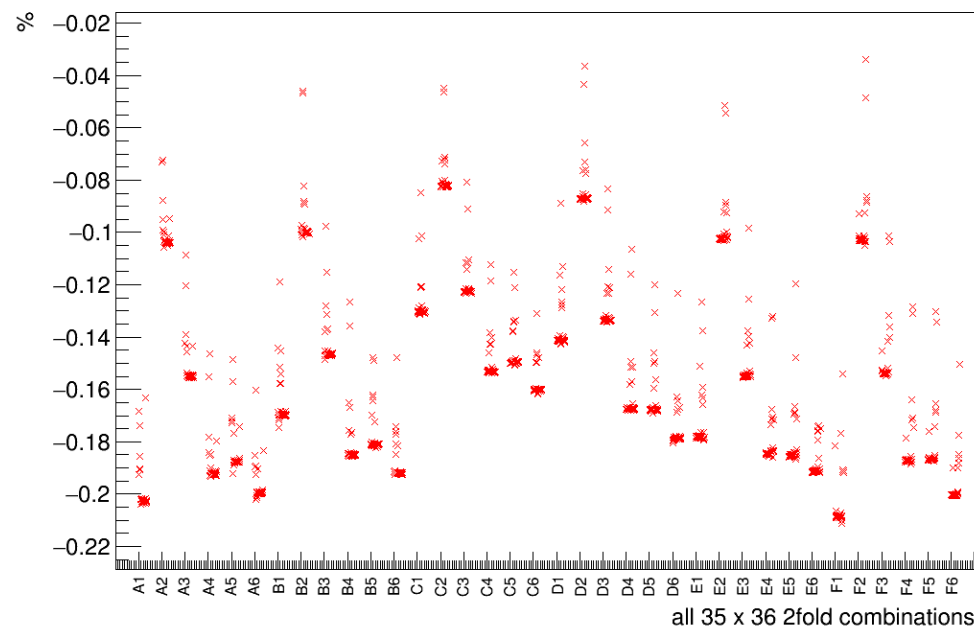
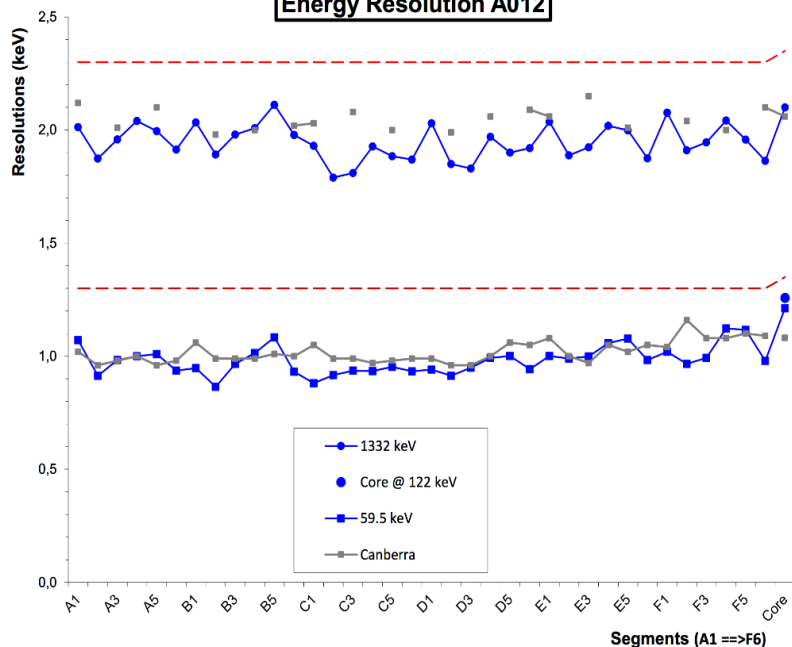
- 2007 – 2013 : 13 capsules
 - 2015 : C012, C014, B014 (finished 2016)
 - 2016 : A011, C002 (repaired detector), A012
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- B014 delivered Nov. 24th 2015, report January 22th 2016
 - A011 delivered March 21st 2016, report April 15th 2016
 - C002 delivered May 10th 2016, report June 16th 2016
 - A012 delivered July 26th 2016, report September 15th 2016

- Cabling, mounting in the cryostat, pumping, cooling: ~1 week



- Basic tests + core and segments resolutions at high and low energy + efficiency (optional): ~2 weeks
- Crosstalk (optional, single): ~ 2 days

Energy Resolution A012

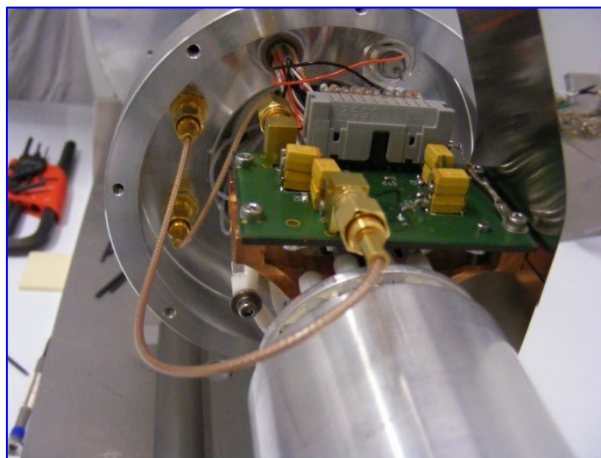


- Pumping + warming + dismounting : few days
- Delivery to Koln



- Note1: very good performance of latest detectors; (very) fast delivery (e.g. A012 ordered by Saclay delivered well in advance).
- Note 2: MZ at Ganil March → Sept 2016

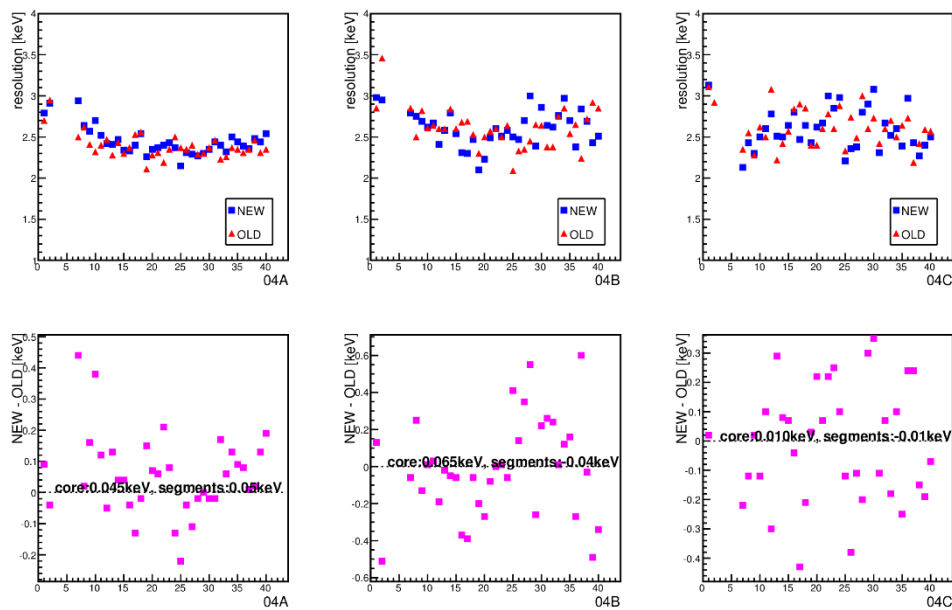
- New activities at and/or contributions from Saclay ?
 - Annealing : where and how ? (we have an oven at Saclay).
 - Other ?
 - Continuations of cold ASIC R&D (collaboration with IPNO) ?



See talk ChT
Agata week Nov. 2014

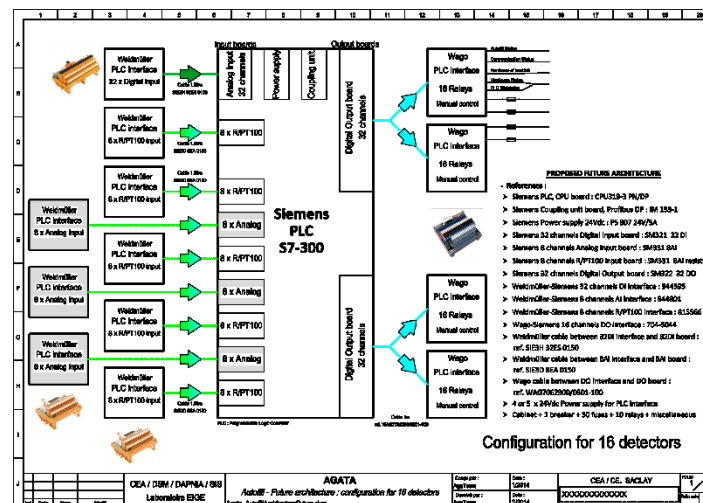
- DEGAS detectors (and more generally infrastructure for DEGAS e.g. AXIS LVPS modules) ?






- Smooth operation...
- Repair 1 AXIS LVPS module
- PT 100 readout (Siemens module SM 331)
 - Test with Saclay PLC May 2015
 - Test at Ganil October 2015: comparison w/wo 2nd PT 100



- Full implementation (modules + GUI) at GANIL : early 2016

- New scalable system for > 16 detectors
- New features : Individual thresholds (PT100, LN2 level), more monitoring, common cryogenic basis, ...
- First proposal October 2013
- Saclay meeting April 2015
- June 2015 : developments postponed ...
- We need to decide asap whether we have to work on the major upgrade or not ?



- More CATs at Saclay for 2 years 
 - smooth tests 
 - good detectors 
- 2nd PT 100 readout implementation 
- Smooth PLC operation 

- Open questions
 - Annealing, maintenance at Saclay ?
 - PLC upgrade ?