

Team Infrastructure

- Detector Support System

- Low Voltage (Preamp, Digitiser...)
- High Voltage System
- Cryogenic Autofill
- Process Control
- Graphical User Interface (*TH*)

- Host Laboratories

- Grounding (*NK*)

Meetings 2010:

21/01 (Legnaro)

15/02

09/03

06/04

27/04

11/05

16/06

01/07 (GSI)

07/07

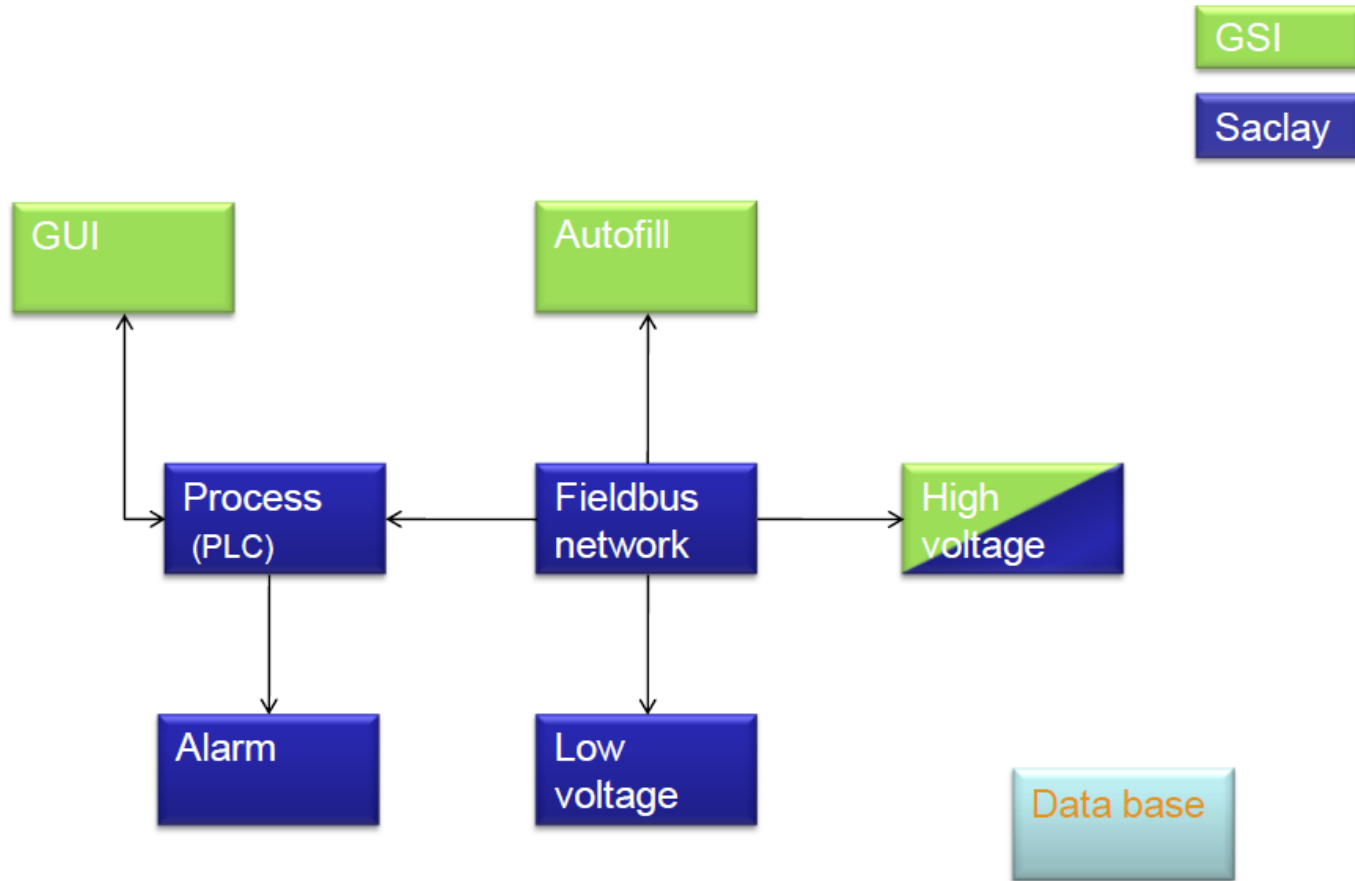
08/09

15/10

04/11



DSS Overview

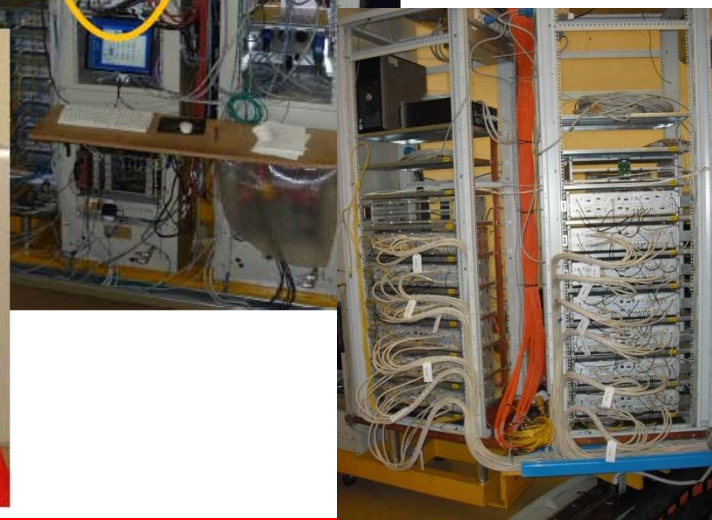


Low Voltage

- Low voltage:
 - 5 crates installed
 - 14 crates altogether (9 Saclay, 2 Legnaro, 3 Munich)
 - Manual controls on front panel have been added for lab purpose



2010:
Changes to current
readout
Communications
Stability
Installation Dec for 5



Low Voltage Filter

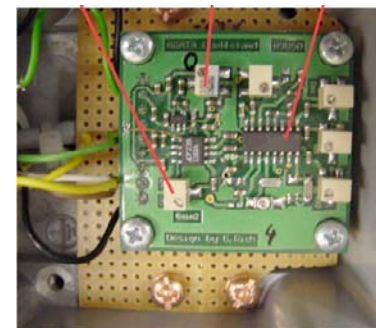
- Oscillation problems have been solved
 - 15 m long cable
 - Voltage control

1st version of the filters

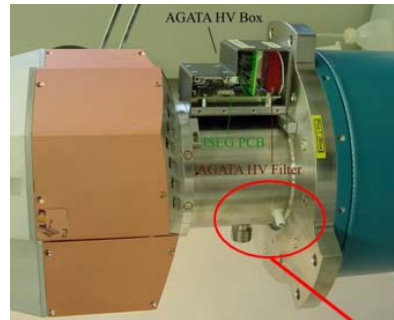
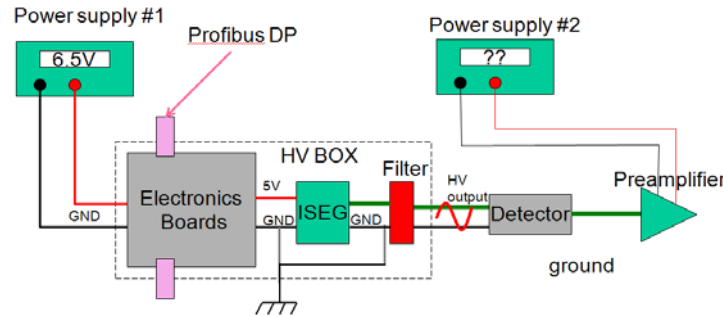
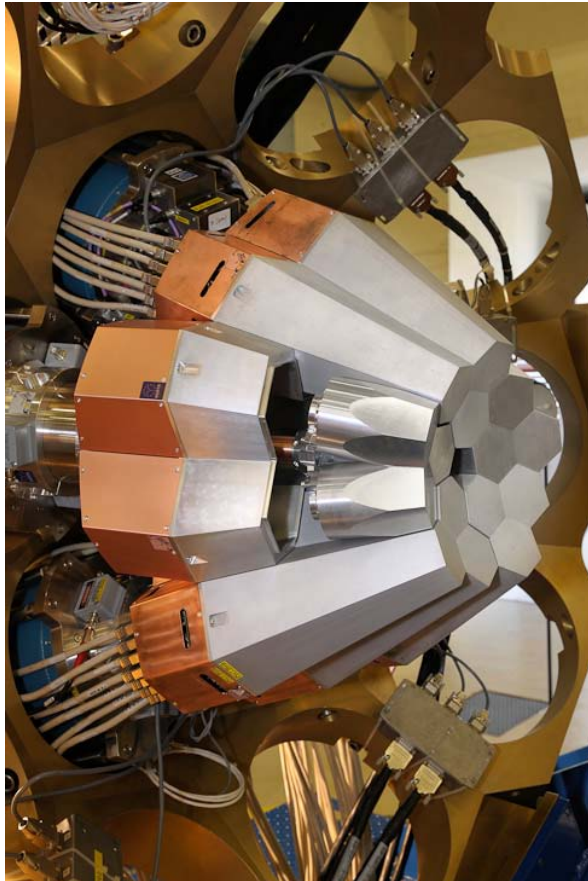
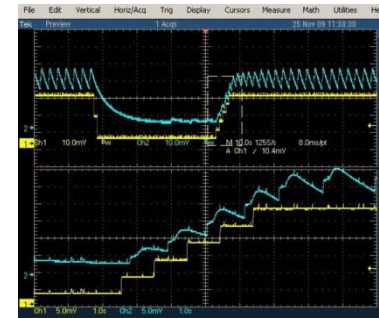


2nd version of the filters in the proposed CTT box

2010:
Awaiting tests at LNL
Integration into Cryostat
Integration of LN2 monitor



High Voltage



2010:
Problems 2009/10
Back down to CTT filter

Visit to ISEG 26th April
Design study at Saclay;
2 options (integrated
filter)

Currently: New study
based on existing, but
improving EMC,
humidity and involving
possible cryostat
modification



Pete Jones
University of Jyväskylä

10th AGATA Week, Lyon
22-26 November 2010



Cryogenic Autofill

2 Crates

- Profibus IO crate: On site for 2 years
- Valve Control Crate: Replaced by LNL VCC



2010:

Ongoing tests at
GSI (TASCA autofill)

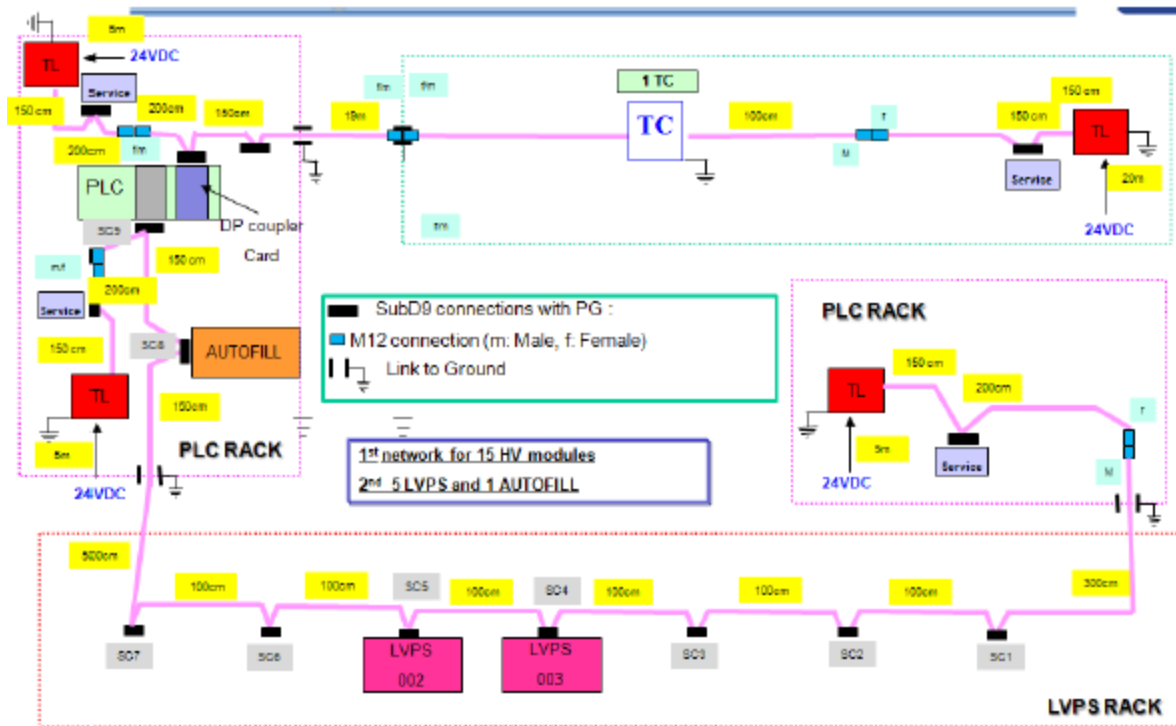
Problems with
crates

To be delivered to
Saclay then LNL



DSS Infrastructure

Modular approach for 8 TC's
Front end cabling



2010:
Installation for future sites
review

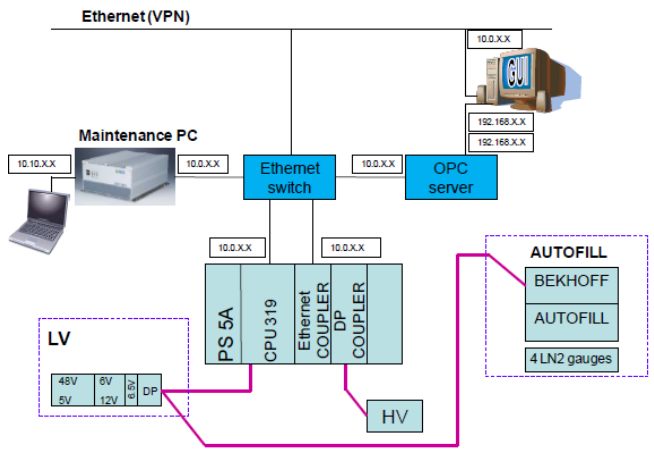
Saclay maintain LNL
phase & prepare
documentation

GSI installation
discussions ongoing



DSS PLC / Control / GUI

PLC running, stable
OPC server allows flexibility for upgrades / integration



2010:
Running OK
Small upgrades
Status messages



T. Habermann



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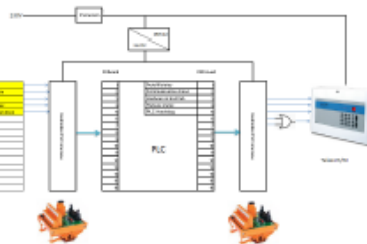


Alarms

Hardware alarms from PLC to LNL Telephone Dialer

Alarms

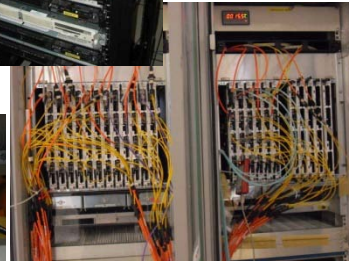
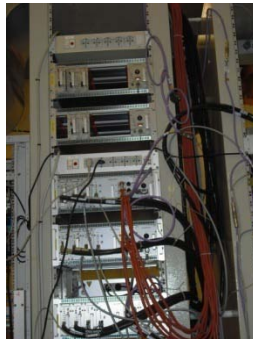
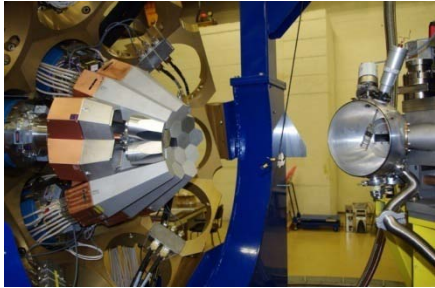
- Inputs:
 - Valves are supplied (checks 24V PS)
 - Profibus network OK
 - UPS (status, mains present, imminent shutdown)
 - PLC watchdog.
- 4 different alarm messages to send:
 - Hardware Status
 - Autofill Status
 - Communication Status
 - Non critical alarms (Detector Too Hot, LV or HV off, UPS on batteries)



2010:
Priority for 2010
Decision taken
Summer 2010
Hardware ready
October 2010
Installation Dec
2010



Host Labs



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10th AGATA Week, Lyon
22-26 November 2010



Project Manager
Enrico Farnea

Infrastructure
E.Farnea

Autofill

E.Farnea / D.Rosso / P.Cocconi / R.Menegazzo

LVPS

E.Farnea / P.Cocconi

Detector test and maintenance

F.Recchia / D.Bazzacco / D.Rosso

Detector alignment and mounting

E.Farnea / C.Fanin

Beam line and scattering chamber

J.J.Valiente-Dobon / A.Gottardo

Ancillary detectors

J.J.Valiente-Dobon / A.Gottardo / D.Mengoni

Digitizers

D.Bortolato / D.Bazzacco

Preprocessing Hardware

D.Bortolato / M.Bellato

Preprocessing Software

D.Bortolato / D.Bazzacco

Infrastructure

UPS: LNL Services

Racks: D.Bortolato / A.Colombo

PSA / DAQ Hardware

M.Gulmini / P.Molini

PSA/DAQ Software

D.Mengoni / D.Bazzacco / F.Recchia / P.Molini / N.Toniolo

Infrastructure

LNL Services



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Infrastructure

LNL Services

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AGATA PROJECT

EMC and GROUNDING

REPORT ON THE EMC EXPERTISE TESTS HELD
@ PADOUA ON 08/07/2009

By: N. KARKOUR, A. CHAROY, A. RICHARD and M. TRIPON

Grounding

THE GROUNDING

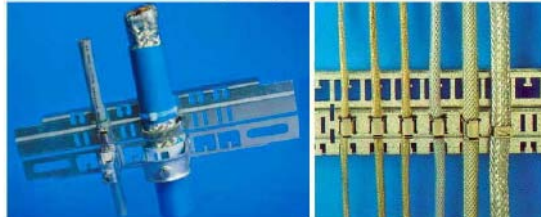
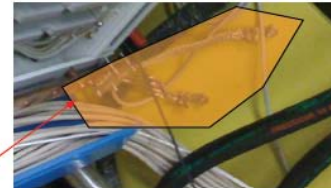
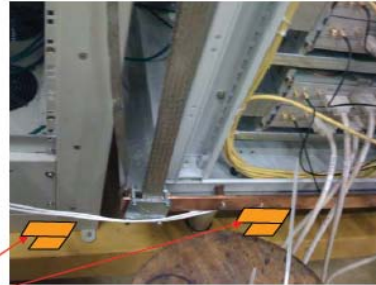


FIGURE23. Some low inductance alternatives to pigtailed

2010:
Follow NK
developments
Cabling, Cryostats..

18.13.1. EMC performance

- AGATA front-end EMC performance is to be measured at both the low and the high frequencies.
- The 50Hz noise is to be less than 100 μ V rms.
- The high-frequency noise in a range 100 kHz - 100 MHz is to be less than 5mV maximum amplitude.



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Summary

Milestones 2010

- Equipment of the LNL detector laboratory
- HV box: fix the problems with the ISEG module
- Alarms to be instrumented and finalised
- Grounding: improvement along the physics campaign
- DSS: All LV to be delivered, patch boxes to be finalised

Ongoing

- New Manager at Saclay (Marc Karolak)
 - LV units (Saclay) (aiming 8/14) & patch boxes (LNL + CTT)
 - HV development plan December 2010
 - Alarms: December 6th
-
- Preperations for Installation for GSI 2012

