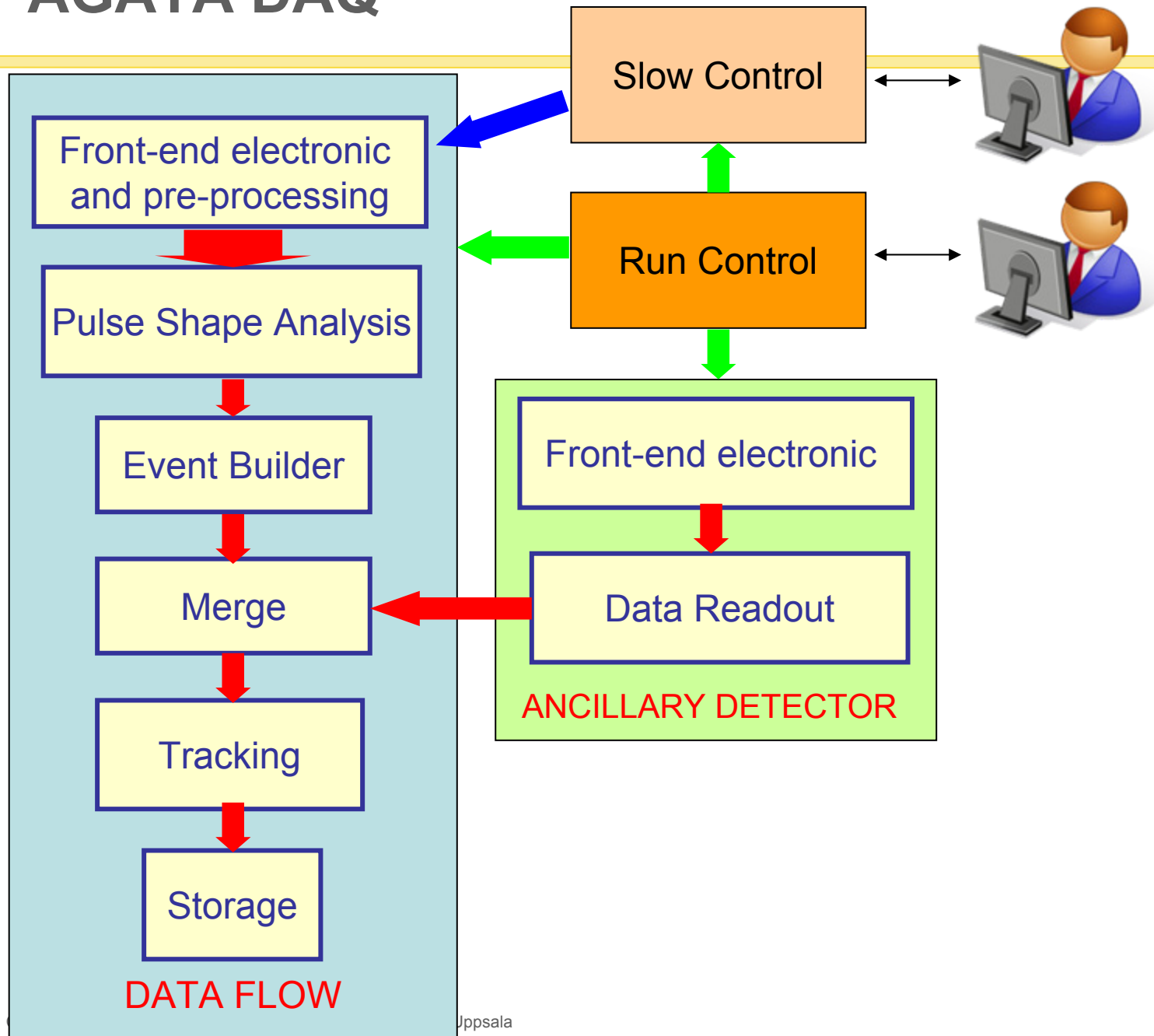# AGATA DAQ Summary

## Ch. T for the DAQ WG

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# AGATA DAQ

# Agenda

*Session 9*

- *Agenda (Ch. T) (5 min)*
- *AGATA DAQ box presentation and demos (85 min)*
  - *Introduction (Xavier Grave, Orsay)*
  - *Wiki + Zabbix demo (Xavier Grave, Orsay)*
  - *RC demo + Data movement + Prisma integration (Pietro Molini, Legnaro)*
  - *GUI (Jurek Grebosz)*
  - *Analysis of Legnaro data using the current NARVAL implementation (Daniele Mengoni, Padova)*

# Agenda
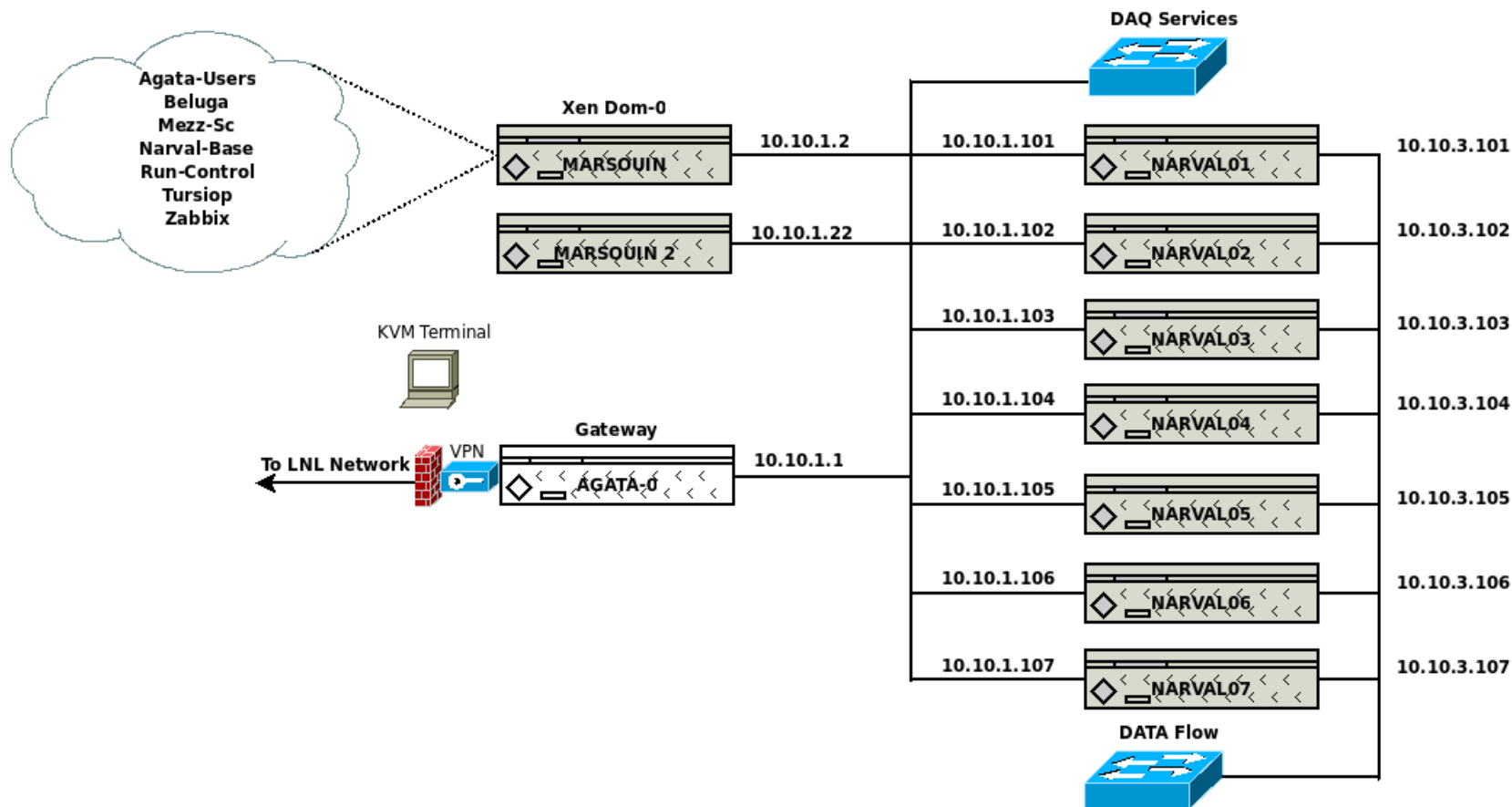
*Session 11*

- *Slow Control (20 min)*
  - *Overview (Frédéric Saillant, Ganil)*
  - *Digitizer SC demo (Vic Pucknell, Daresbury)*
- *ADF status (Olivier Stézowski, IPN Lyon) (10min)*
- *DAQ rules, organization, manpower, etc. (Ch. T) (20 min)*
- *Discussion (40 min)*

# The DAQ BOX

# The DAQ box at Legnaro

# DAQ Box Demo

NARVAL + RC + GUI + Spec. Server + PSA

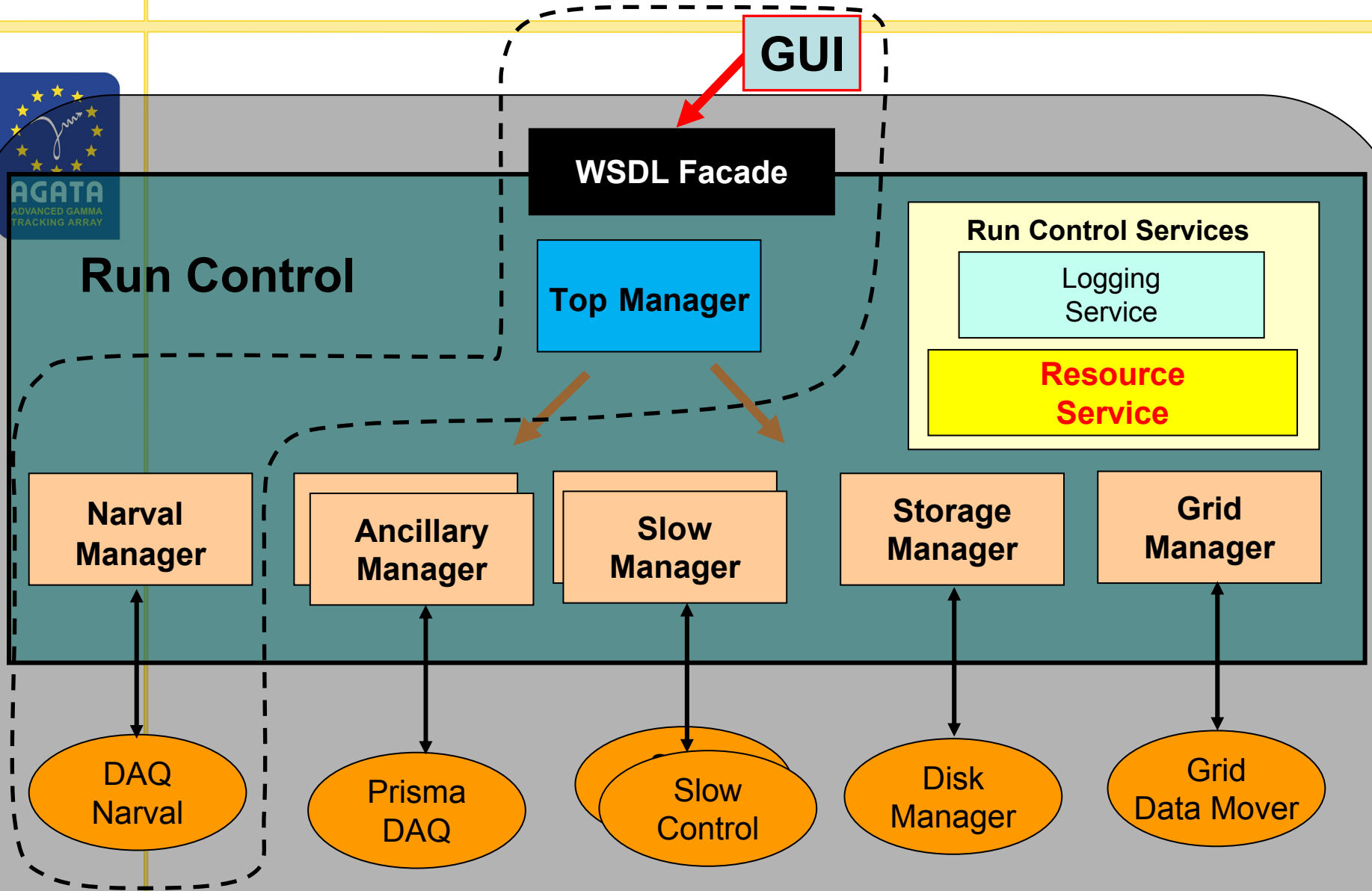Xavier + Pietro + Jurek + Daniele

Real demo using Legnaro DAQ BOX

# Monitoring / Documentation

- Wiki (Daq box + Orsay mirror)

    http://csngwinfo.in2p3.fr/

- Zabbix

# Run Control Structure

# Log Book

# Tasks of GUI of DAQ

Load (unload) the configuration of actors (may be differnet)
(ask DAQ  Narval to „create itself")

Start / Stop / Pause / Resume – of the measurement

Reset  / Recover from an error state

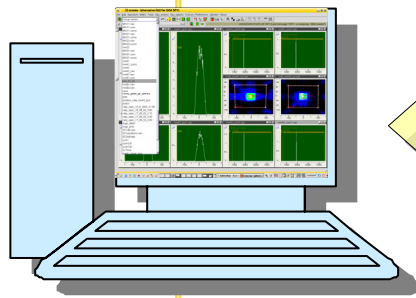Define the filename to store the data

*But also:*

Give the information about the system itself – to monitore its work

- monitoring data flow („ratios")
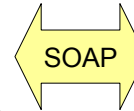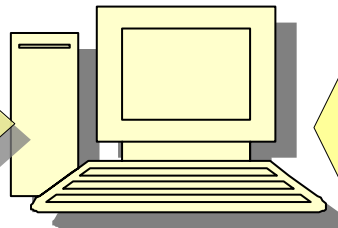
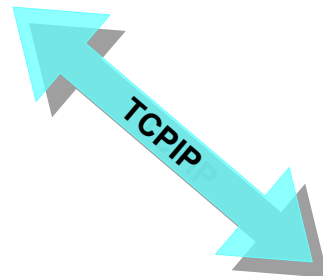- monitoring quality of data (spectra)
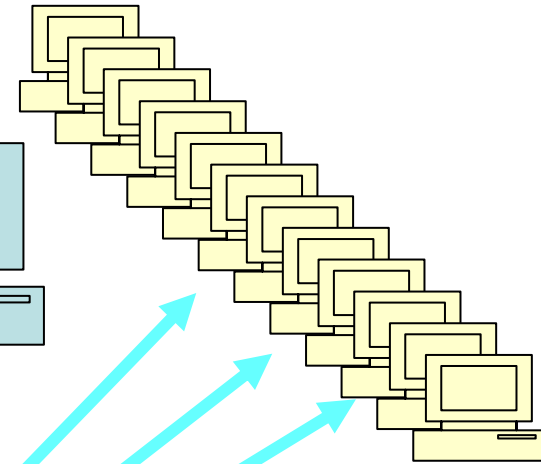
# Monitoring spectra
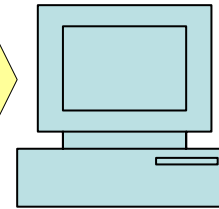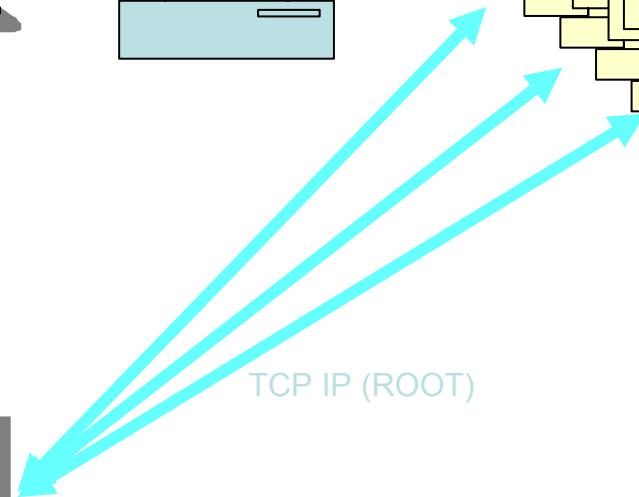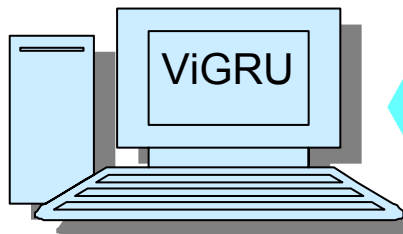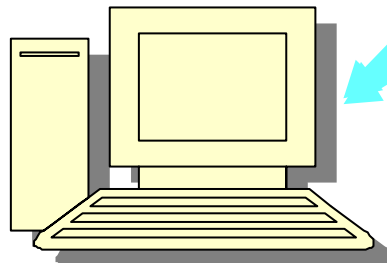
# $^{137}$Cs-$^{60}$Co OFFLINE data analysis
# using present AGATA-DAQ system at LNL
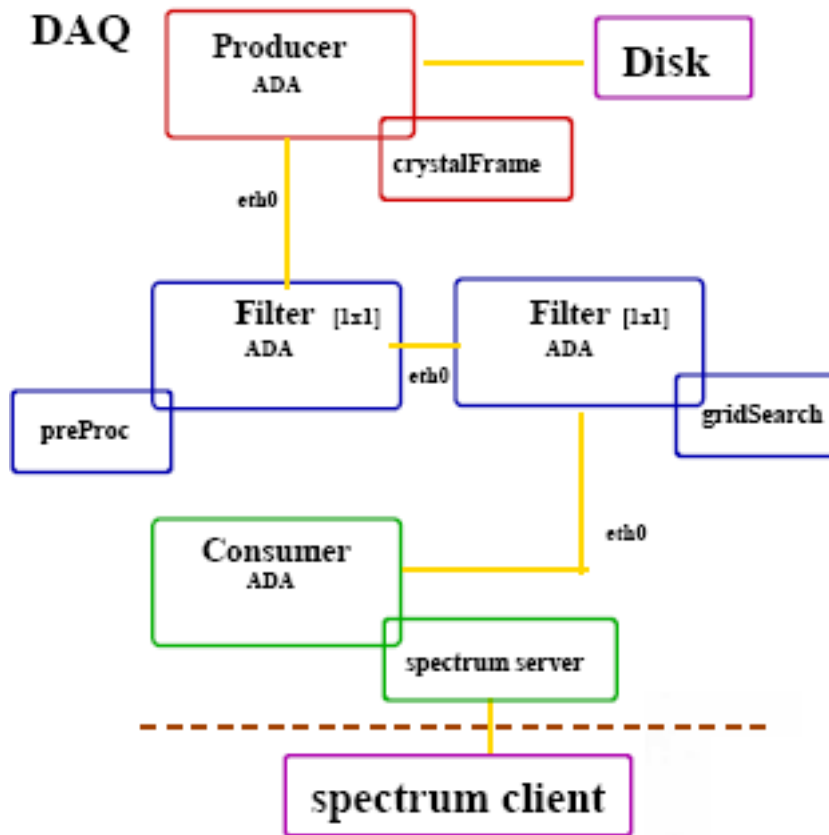
# Slow Control + GUI

Padova meeting in June

- Digitizer almost finished

- Basic SC for carrier + Mezzanine + Trigger; still a lot to do

- No manpower for carrier + Mezzanine + Trigger GUI

- Parameter save/restore: agreement

- WSDL: agreement

# Digitizer SC

## Vic's demo

# ADF

- Development phase I: tag soon

- Next : phase II
  - configuration frame / meta data
  - How do algo speak together / share information ?
  - Algo form to be filled

# Rules, Organization, Policies

See document on the DAQ Web

- WG Organization : 2 teams, 6 tasks
- Maintenance and support
- Disk policy
- Backup
- Moving data

# Data movement

- Moving data to Bologna Tier 1 : test soon

# TODO 1

- To be added to Data Flow and tested :
  - Event Builder
  - Tracking
  - Storage actor (GANIL/LPC based one)
- To be developed :
  - Prisma merger
- Disk servers
  - 60 TB to be physically installed (in Tier 2 room)
  - need for formatting and GPFS installation
- Spy (watcher)

# TODO 2

- PRISMA Xdaq
  - Integration in Data Flow
- LogBook integration
  - How often automatic logs are sent from RC?
  - Define group and user policy
- SRM for Data Movement
  - StoRM installation and configuration
  - V.O. and Grid security issues
  - Tests between LNL and CNAF
- Slow Control
  - Tests with digitizers' WSDL made by Vic Pucknell
- All-in-one configuration tool:
  - Global Configuration Key
  - Subsystems' configuration (narval, prisma…) in the Resource Service DB
  - Narval topology handler
  - Xdaq configurations

# TODO 3

- Mac and IP address assignment and policy
- Slow Control Carrier/Mezzanine/GTS
- GUI Control Carrier/Mezzanine/GTS
- SC WSDL
- SC Save/Restore DataBase
- Log Book Soap interface

- Data Quality Monitor

- LuT detector – digitizer – FEE – DAQ … connections with Lyon DB

# TODO 4

- Purchase remaining hardware

# Conclusion

Lot has been done since last Agata week

DAQ box demo

DAQ will run in October with 1 TC

Some part may be not very user-friendly and stable

Manpower needed for DQM & GUI

Feedback needed

Training when DAQ stable