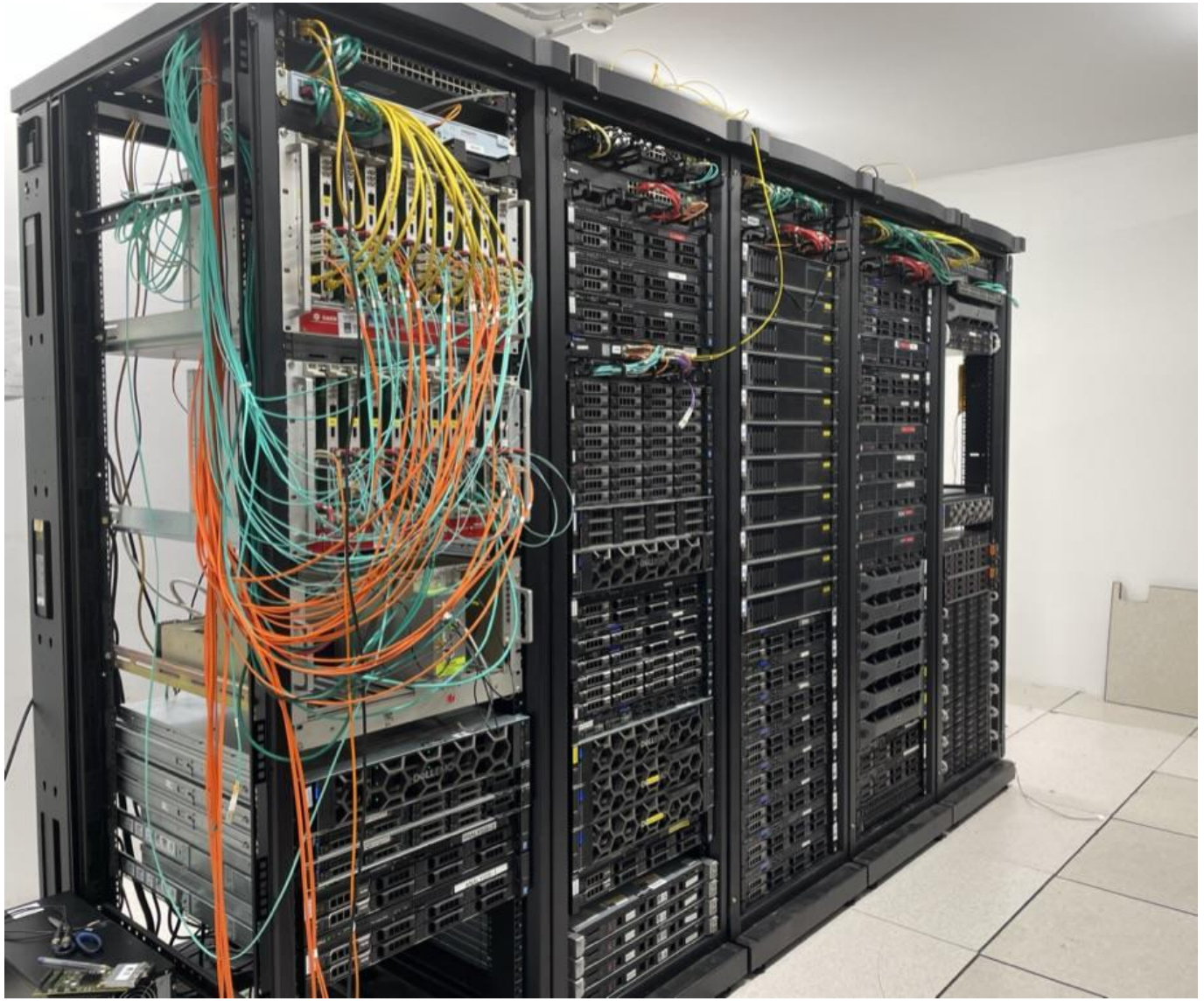
Istituto Nazionale di Fisica Nucleare
LABORATORI NAZIONALI DI LEGNARO

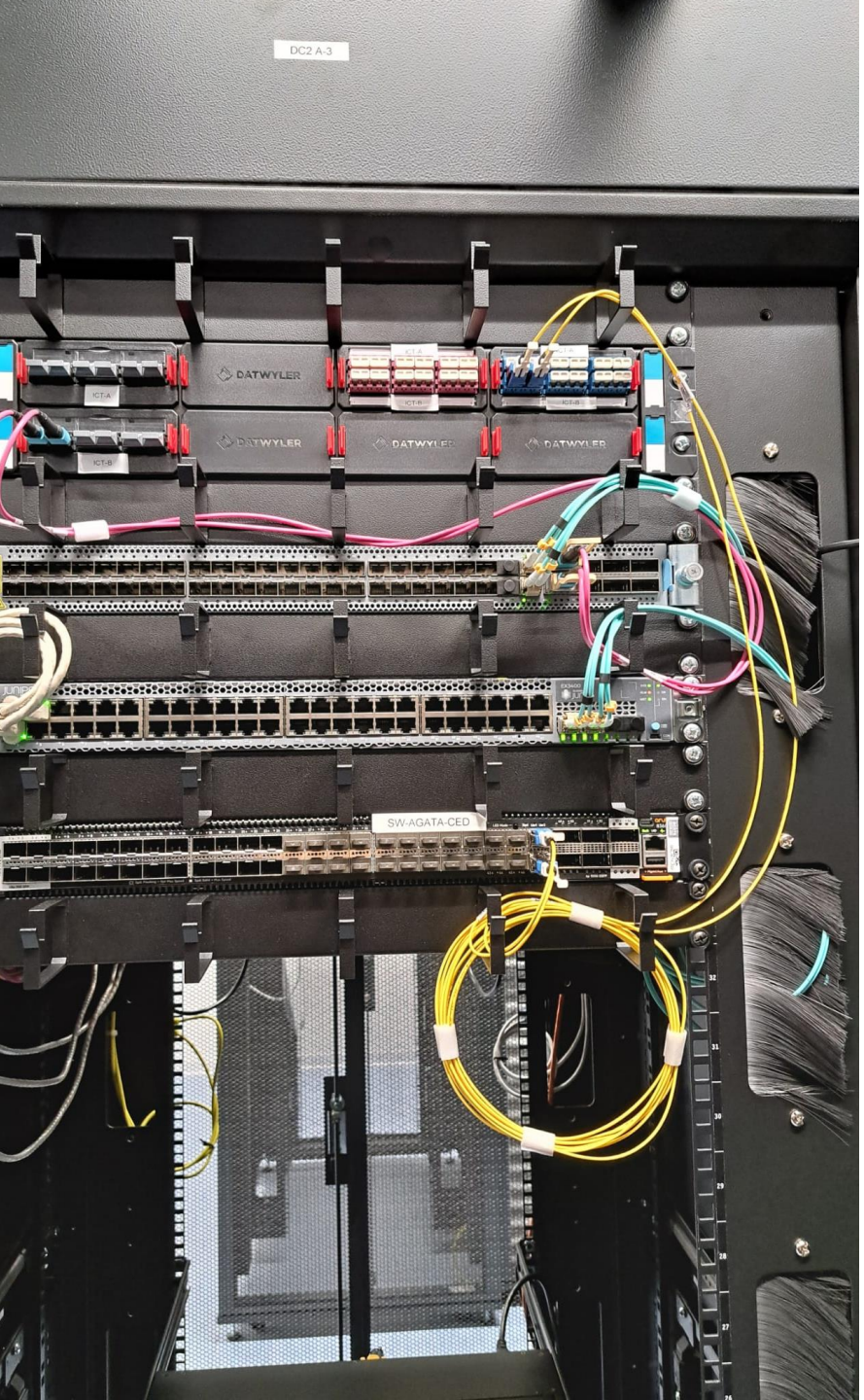
LNL DAQ INFRASTRUCTURE

Alain Goasduff (INFN LNL)

CURRENT SITUATION

- Upgrade of the CEPH Storage (Patrick's talk)
- Upgrade of the Analysis cluster (Guillaume's talk)
- Migration of XDAQ nodes to Alma9 in progress (missing PRISMA)





NETWORK EXTENSION TO THE CC

- AGATA Services already extended (172.16.0.0/16),
- Moving the ancillary servers out of VAX (Fall 2025)
  - Ancillary event building
  - Run Control server
  - Ancillary disk servers
- Starting to move AGATA servers (January 2026 – Shutdown manutention TANDEM):
  - Analysis nodes
  - Knodes
  - Disk servers (after extension of the 172.17.0.0/16)

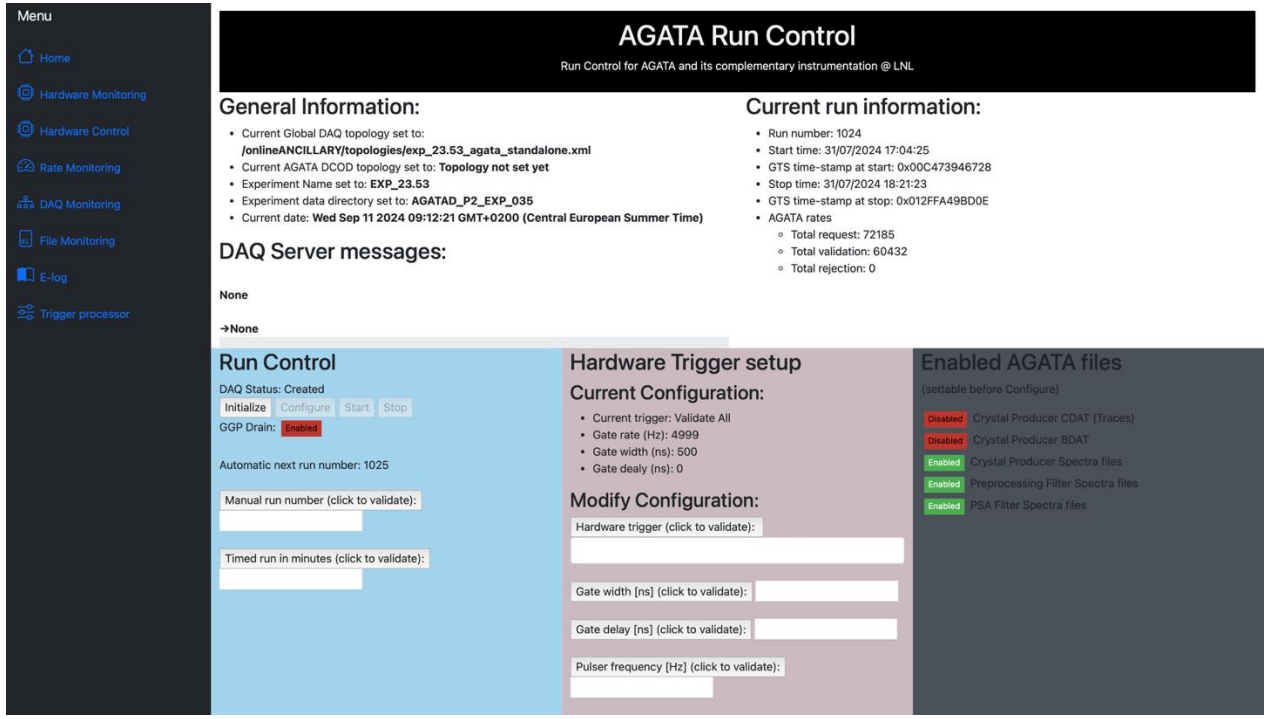
V2 INSTALLATION

- LVPS delivered at LNL
- 4x 100Gbps link installed between the experimental hall and VAX (MTP-MTP OM5)

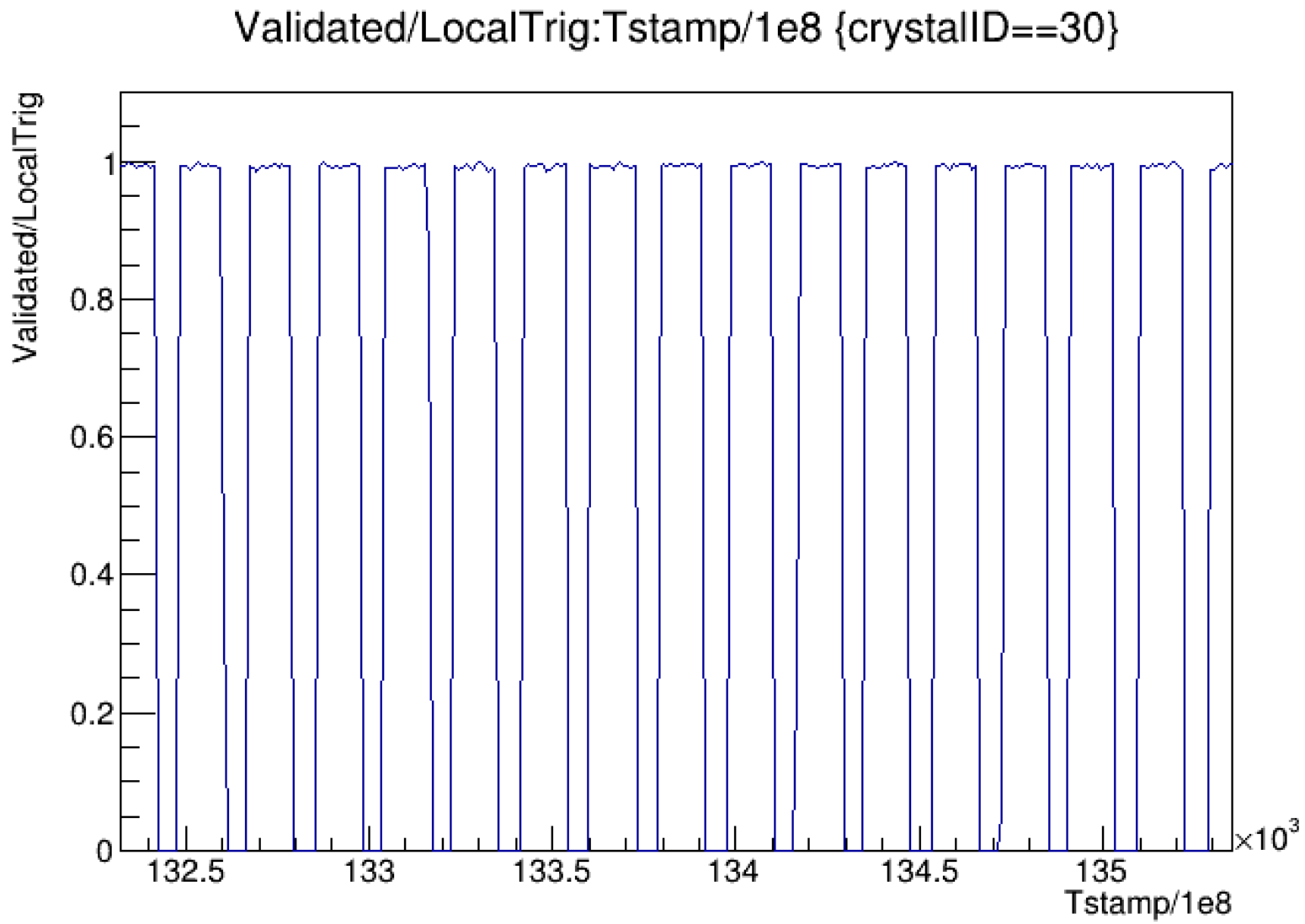
RUN CONTROL UPGRADE

- Slow control of the Hardware Trigger
- Timed run for source measurement
- Automatic post to the elog at stop
- Generation of MetaData
  - No dependency root file

```
[xdaq@anc-rc run_0182_01-08-2025_22h24m04s]$ ll
total 68
drwxrwxrwx 41 dcod data_group  4096 Aug  1 20:08 Conf
dr-xr-xr-x 31 dcod data_group  4096 Aug  2 01:05 Data
-rwxrwxrwx  1 dcod data_group 57384 Aug  1 20:08 gen_conf.py
drwxrwxrwx  2 dcod data_group    47 Aug  2 01:05 MetaData
[xdaq@anc-rc run_0182_01-08-2025_22h24m04s]$ cd MetaData/
[xdaq@anc-rc MetaData]$ ll
total 260
-rw-rw-rw- 1 dcod data_group 266236 Aug  2 01:05 data_monitor_run_182.root
[xdaq@anc-rc MetaData]$
```



DEAD TIME MONITORING

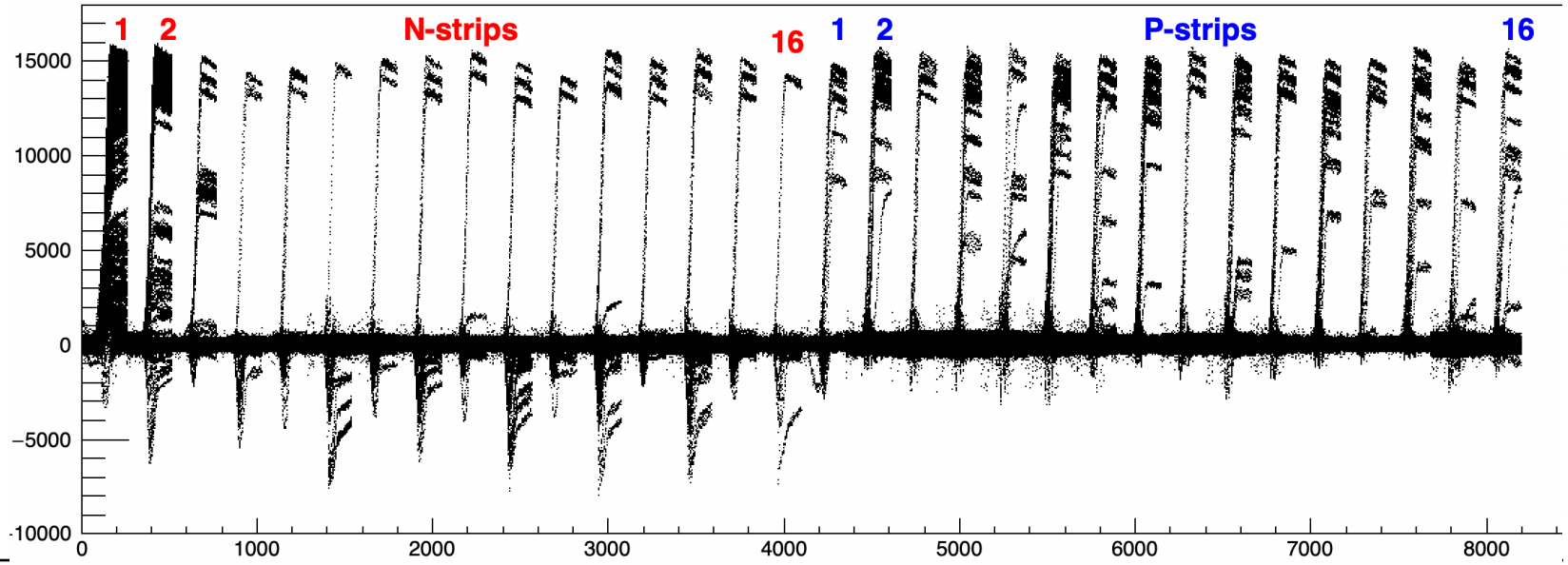


ANCILLARY UPGRADE

- New DPP-PHA version for VX2740 PHA: 1 single analog trace in 16-bits
  - Data Bandwidth / 2 for the traces → Done
  - Switch from 1 Gbps to 10 Gbps network connection → To be done

Tested with GRIT 1.5 mm detector (32 channels)

ITL of the board compatible with AGATA (one master + 37 slaves)



That's all Folks!