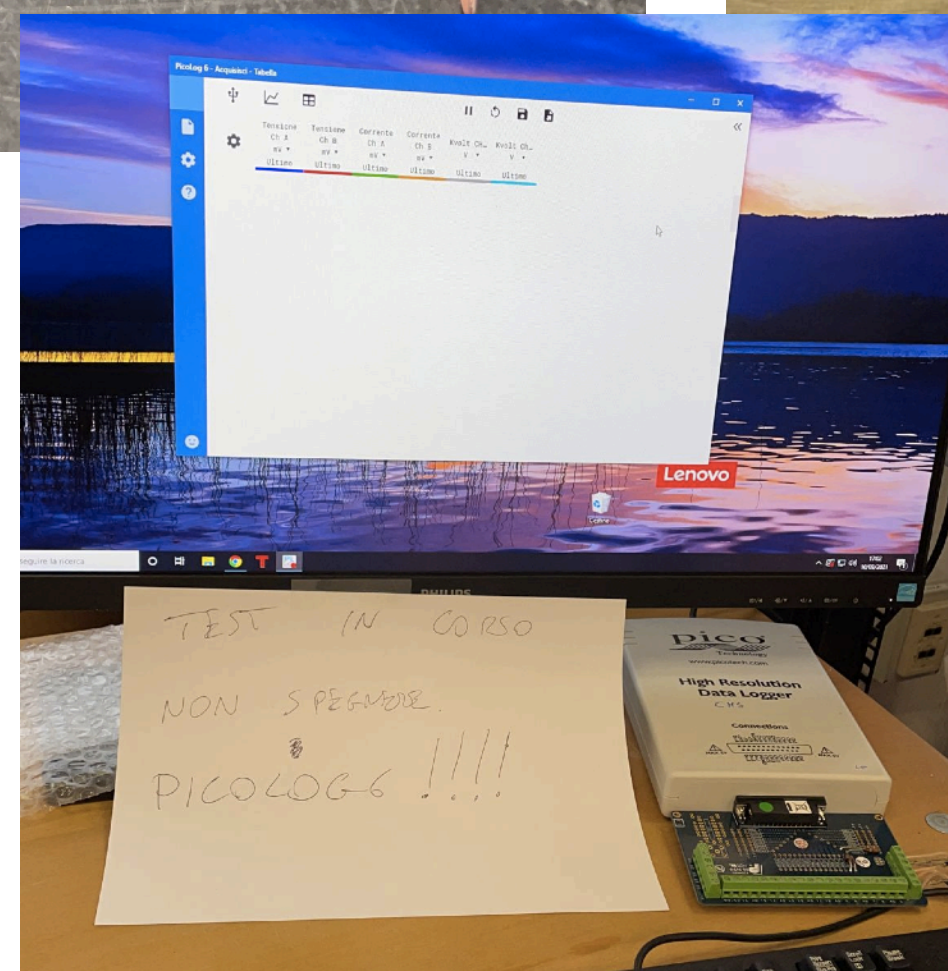
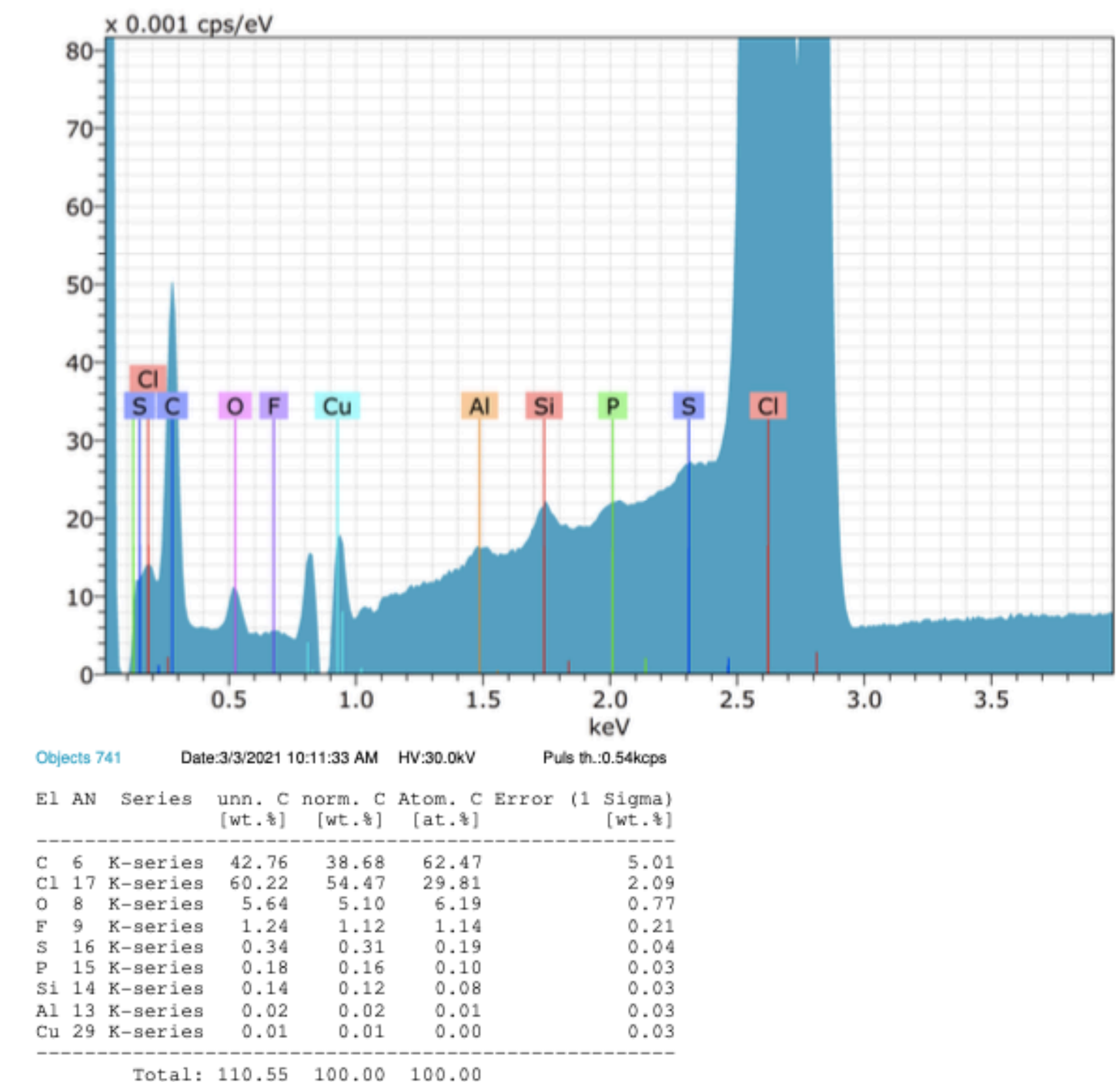
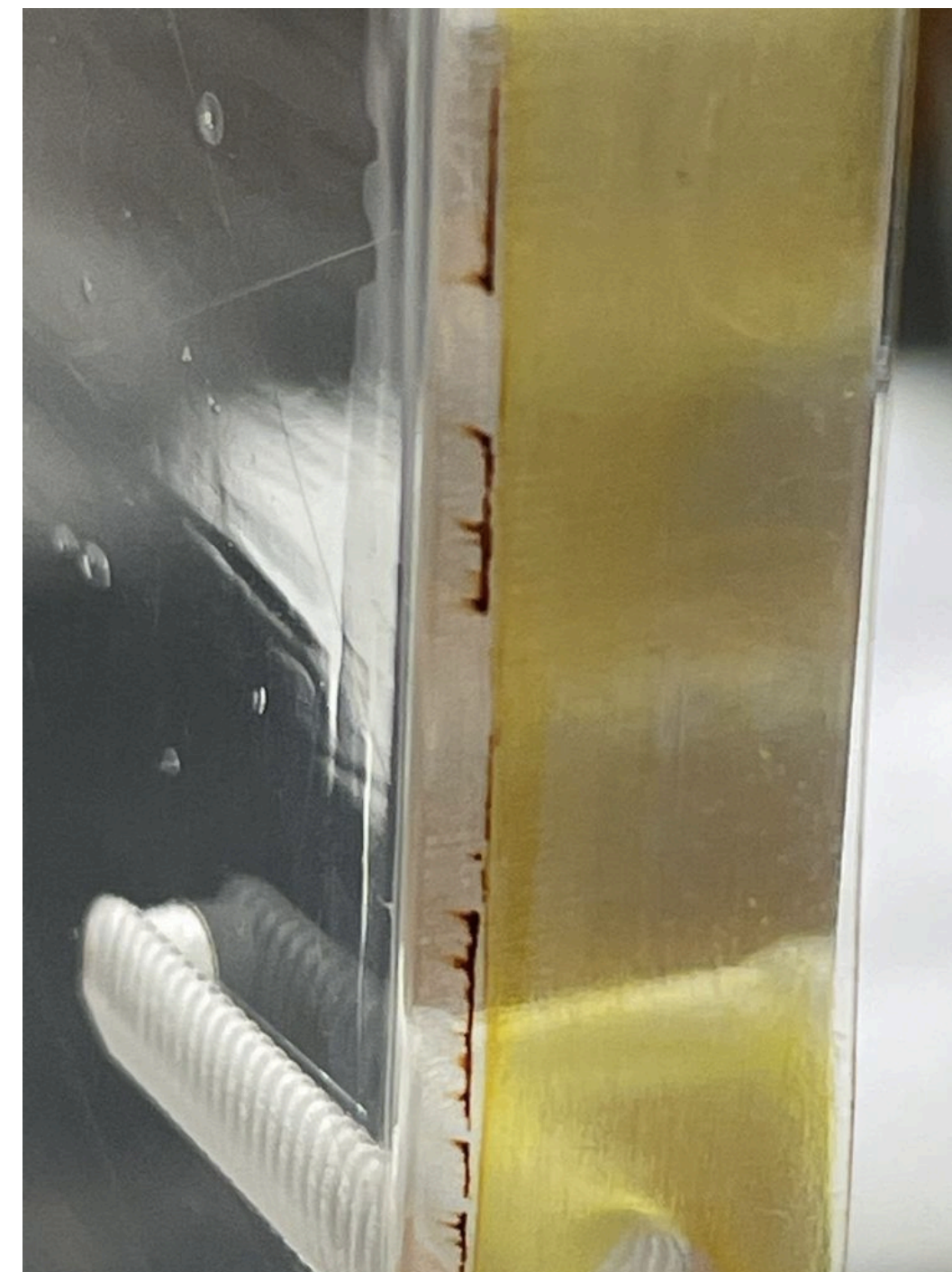
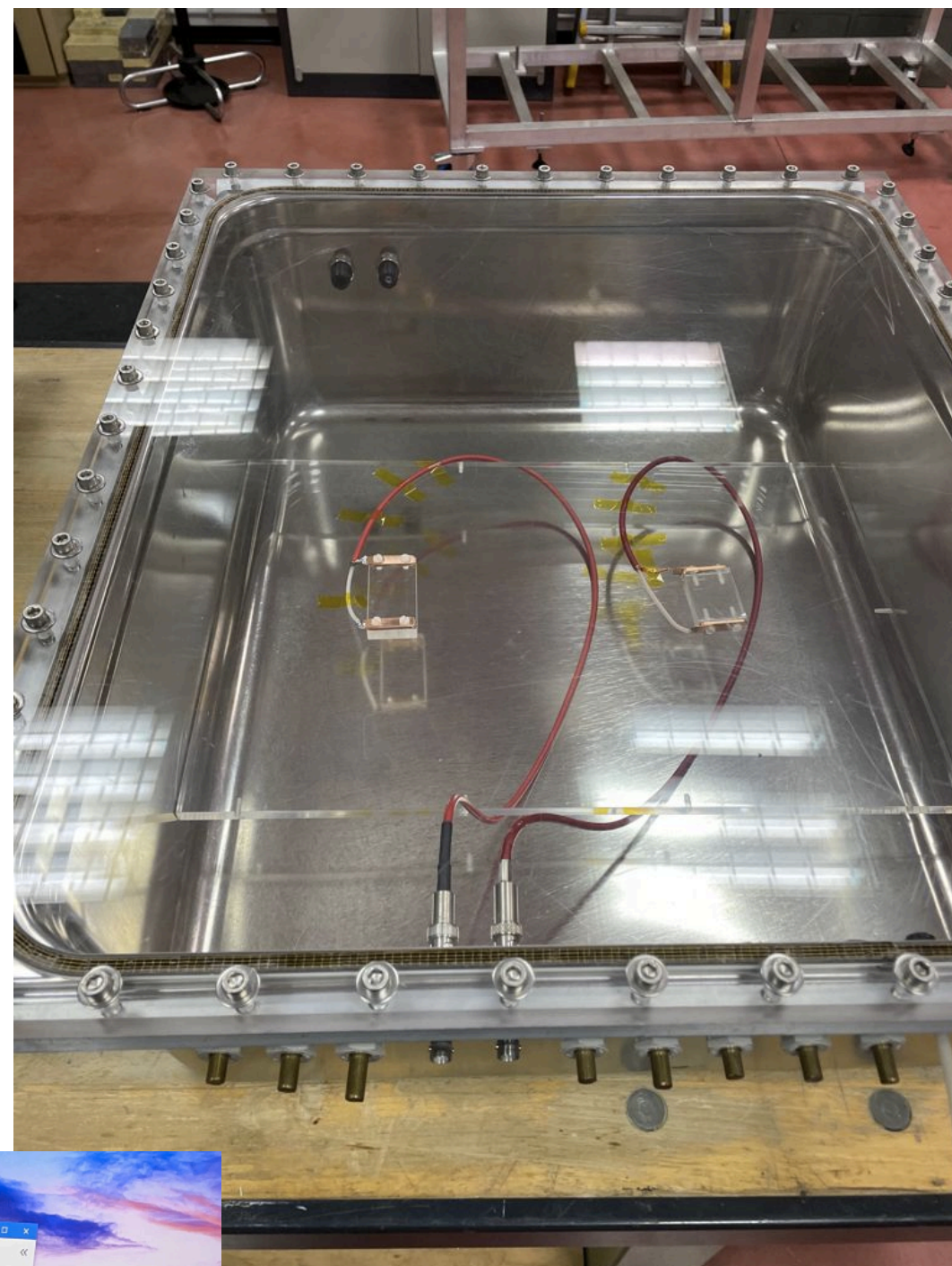
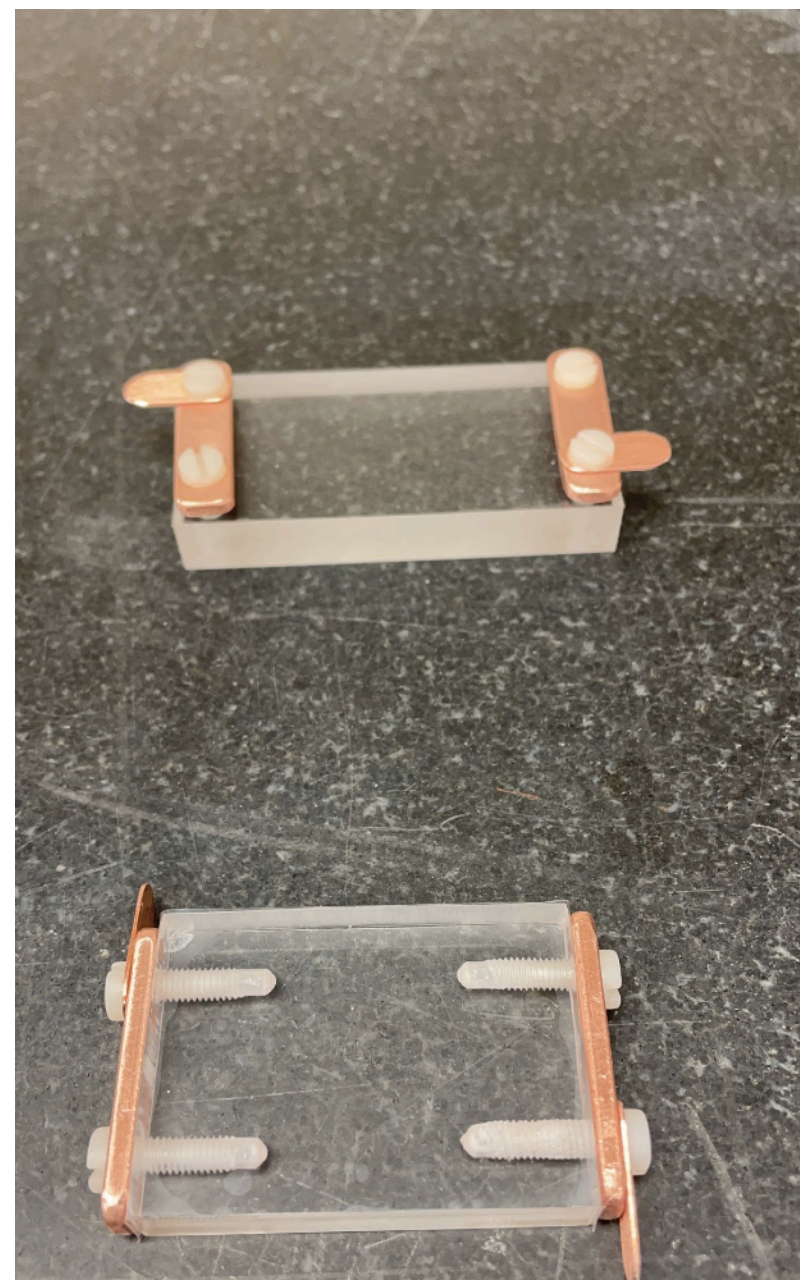


Design & Integration

update 11/3/2021

what's going on on at LNF (con't)



- LIME2 (GEM (LIME1), cathode, source window, faraday cage ecc) is almost ready hopefully next week we can start to flux it
- Chiara after the calibration of PMTs and test on the sample will follow the characterisation of LIME2.
- LEMON setup for fluorescence and ArCF4 test.

what's going on at LNGS

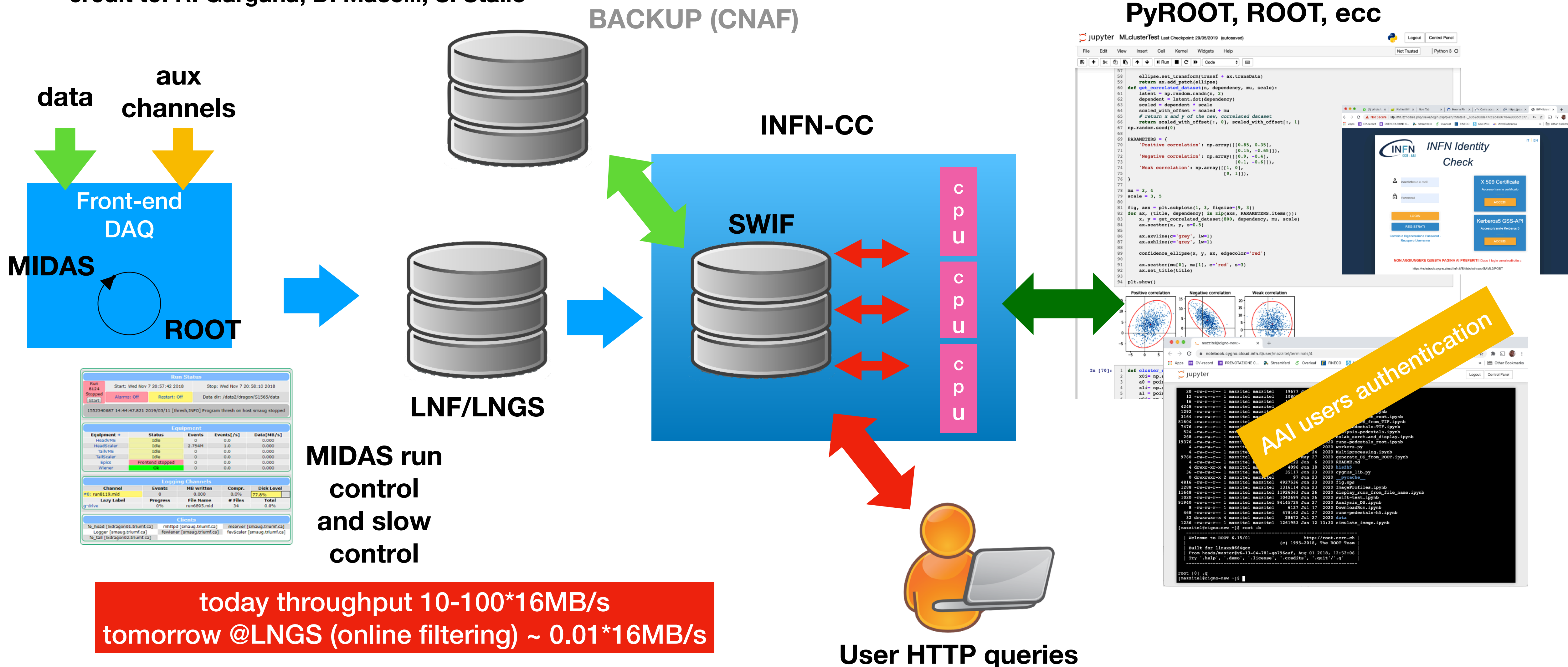
- LNGS SSP provide a note on the safety in the area that NIER is evaluating for LIME PRE
- today (4 PM) there is a meeting with the company assembling the gas system to make the final check for the PRA
- the “LIME Fascicolo Tecnico” v4.0 is under review of the LNGS service for final approval
- the quotation for civil work is ongoing and soon the tender can start.
- tomorrow NIER will present the first draft of the PRA to be submitted at LNGS services for comments and integration.

INFN-CC @ LNGS-LNF (alpha)

<https://notebook.cygno.cloud.infn.it/>

credit to: R. Gargana, D. Maselli, S. Stalio

JupyterHUB notebook: Python2/3, PyROOT, ROOT, ecc



SaaS - Jupyter Web App (beta)

credits to
M. Antonacci, D. Spiga and S. Stalio

<https://github.com/jupyter/jupyter/wiki/jupyter-kernels>

experiment environment

Spawner Options

Select your desired image:

Select your desired memory size:

GPU:

Spawn

SaaS resources

cloud storage

permanent local storage

user scratch data

Python 3

ROOT C++ (Python 3)

Text File

Folder

Terminal

kernels

tools

jupyter

Home

Token

Logout

Your server is starting up.

You will be redirected automatically when it's ready for you.

Server ready at /user/mazzitel@inf.n.it/

fn.it/

Project Jupyter exists to develop open-source software, open-standards, and services for interactive computing across dozens of programming languages.

php

Julia

VB

Python

R

Spark

F#

C#

jupyter

192.135.24.67:8888/user/mazzitel@inf.n.it/tree

Logout

Control Panel

Files

Running

Clusters

Select items to perform actions on them.

0

cloud-storage

local-storage

Upload

New

Notebook:

Python 3

ROOT C++ (Python 3)

Text File

Folder

Terminal

jupyter MLclusterTest Last Checkpoint: 28/05/2019 (autosaved)

File

Edit

View

Insert

Cell

Kernel

Widgets

Help

Run

Stop

Restart

Code

57

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ellipsoid.set_transform(transf + ax.transData)

return ax.add_patch(ellipse)

latent = np.random.randn(n, 3)

dependent = latent.dot(dependency)

scaled = dependent * scale

scaled_with_offset = scaled + mu

return x and y of the new, correlated dataset

return scaled_with_offset[:, 0], scaled_with_offset[:, 1]

np.random.seed(0)

PARAMETERS = {

'Positive correlation': np.array([10.85, 0.35]),

[0.15, -0.45]),

'Negative correlation': np.array([10.5, -0.4]),

[0.2, -0.6]),

'Weak correlation': np.array([1, 0]),

[8, 1]),

}

jupyter root_nb_example Last Checkpoint: 20/06/2020 (autosaved)

File

Edit

View

Insert

Cell

Kernel

Widgets

Help

Run

Stop

Restart

Code

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swift2S3

- We (mainly me up to now) are the beta tester of the new INFN cloud
- CYGNO, actually a reviewed video of the presentation done in CSN2, will be the introduction of the INFN training course https://www.youtube.com/watch?v=s_o5AR0qd1Q
- The new cloud (INFN cloud) require data repository on S3 instead of swift. S3 will be also available on the cloud container as POSIX filesystem
- we have an ad hoc configuration where data are open and accessible for reading from everywhere via REST API (https) and that can be write only by accounted user

- data migration started and https access tested:

```
Welcome to JupyROOT 6.17/01
```

```
1 %timeit ROOT.TFile.Open('https://swift.cloud.infn.it:8080/v1/AUTH_le60fe39fba04701aa5ffc0b97871ed8/Cygnus/Data/LAB/914 ms ± 83.2 ms per loop (mean ± std. dev. of 7 runs, 1 loop each)
```

```
1 %timeit ROOT.TFile.Open('https://cygnus-minio.cloud.infn.it/Data/LAB/histograms_Run03934.root')
2.06 s ± 107 ms per loop (mean ± std. dev. of 7 runs, 1 loop each)
```

- new script for ROOTing and pushing data on new S3 repository from DAQ are under test.
- extensive test on S3 from cloud container have t be done