



Leonardo Sala :: AWI :: Paul Scherrer Institut

7904 update

AWI Department update meeting 2024.05.27 / PSI

Data Analysis and Research Infra - mission

We provide the infrastructure services and consultancy for acquisition of high throughput detectors, high performance data storage, and required computational resources and tools for data analysis, including integration with Data Curation and management systems.

We have strong collaboration with Photon Science Department beamlines (SLS, SwissFEL) and the Controls Section, as we provide expertise and collaborate on projects.



Alvis Dorigo
SwissFEL



Borys Sharapov
SLS2 project



Ivano Talamo
Ra Cluster



Joshua Taylor
SLS



Leonardo Sala
Group Leader

Data Analysis and Research Infra - mission

Our main **tasks** are:

- support high-performance servers for acquisition of multi-GB detectors
- architect and support dedicated high-throughput networking for those detectors (100G and up)
- architect and support performant and complex storage solutions, including data policies and their implementation
- provide resources forecasts and budget planning
- consult on special projects

The main **services** we are running are:

- the SLS and the SwissFEL Online Clusters, providing storage, compute and special DAQ servers for data taking
- the RA Data analysis cluster, service internal and external scientists in their data analysis needs

Updates: personnel

- Josh will officially leave on May 31, 2024
 - He will be on site tomorrow afternoon! Please pass by to say hi if you are around
 - Card is in Alun's office
- SLS SysAdmin position will open soon

SwissFEL

- Weird effects in acquiring Jungfrau 16M at SwissFEL
 - studying interplay between new SSD cache and data writing
 - more experimentation later
- RHEL8 migration completed
- Documentation writing and first version online
- Implementing JFJoch deployment pipelines

Ra

- Preparing Storage upgrades to latest Storage Scale version
- Shared compute resources
 - evaluating best way to use SLURM
 - first PoC with users soon
- Cold Aisle extension
 - AIT should be able to add 4 more racks by end August
 - Additional space is fundamental to install additional storage and compute

SLS₂

- Reviewing PSD requirements (still incoming)
 - points to be clarified
 - size of SSD buffer
 - GPUs models and GPU/CPU ratio
- Trying to understand if ETHZ new compute WTO is usable this year

Questions?

