Technical Coordination Workshop European XFEL

9th October 2020

ExPaNDS/PaNOSC Technical Coordination Workshop

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European XFEL

Hamburg, Germany

Connected to DESY

6 instruments

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PaNOSC Team at EuXFEL

IT & Data Management (WP3)

Krzysztof Wrona

Sandor Brockhauser

Yury Kirienko

Luis Maia

Sudhanshu Kumar Singh

Data Analysis (WP4)

Hans Fangohr

Thomas Kluyver

Robert Rosca

X-ray Simulation (WP5)

Juncheng E

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WP4 Work and Skills at EuXFEL

Thomas Kluyver

- Expertise: Python, Open Source Development
- Contributions: support for a variety of open source projects including Jupyter and HDF5 related projects; support at facility to promote remote work and use of Jupyter

Robert Rosca

- Expertise: Python, Julia, Reproducibility
- Contributions: implementing FAIR data analysis, improving reproducibility of data analysis and software deployments, close work with scientists to work out requirements/usecases
- Work on OSCOVIDA

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Portal Experience

- Deployed portal on a laptop in January
  - Deployment was simple, but not really representative of a real-life usecase
  - Data analysis group can't deploy this onto facility infrastructure
- Early discussions with DESY about their approach
  - Rancher managed Kubernetes cluster deployed at DESY
  - EuXFEL & DESY share infrastructure, may provide shared portal
- Ran a mini-workshop on OpenStack with Michael Schuh

- Members of WP4 at EuXFEL aren't IT/sysadmins :P

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Technical Challenges

- Portal architecture focusing on cloud technologies & concepts
  - We don’t have much experience of this, so it’s not easy to follow & contribute
  - Michael Schuh’s comments will be similar to ours
- We’ll rely on help from our friends at DESY with these aspects of the project
  - On-site integration and deployment of portal
  - AAI and federated cloud

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Coronavirus Changes

- JupyterHub already provided (by DESY)
- Challenges for real-time analysis
  - EuXFEL control system is now accessible remotely
  - Online (real-time)analysis/feedback is now accessible remotely
  - Set up a persistent video call in experimental hutch
- Collaboration tools: Zoom, Overleaf, JustSocial, Zulip (internally for data analysis)

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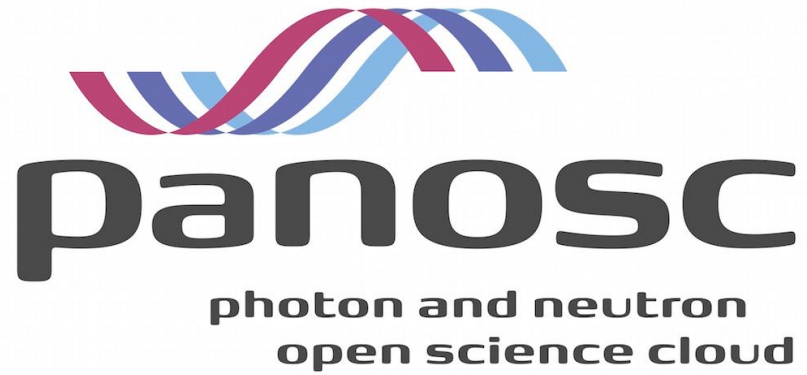

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