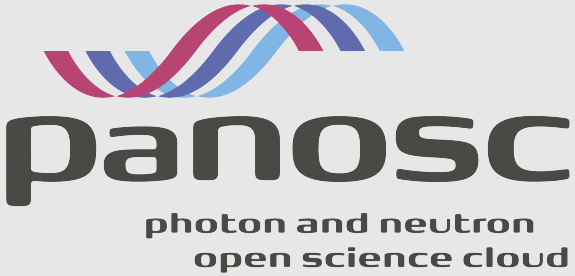

Thoughts on Federated Search Demonstrator, WP4 & How to aggregate facility results

Gareth Murphy

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 823852

Federated Search

- Leader: ELI. Contributors: ESS, CERIC-ERIC
- This task will link the PaNOSC beneficiaries' data catalogs to the EOSC hub.
- The EOSC hub will provide the API needed to share and search metadata.
- In the absence of a definition following the OpenAIRE DOI equivalent scheme should yield sufficiently wide exposure.
- A web service demonstrator will be provided that allows searching all PaNOSC partner sites for available datasets using the common metadata API.
- The demonstrator will showcase how access to the catalogue will provide identifiers that will allow the found data to be accessed and used for analysis.
- Once the demonstrator is working the next step will be to work with EOSC hub to provide a production ready service to be provided as part of EOSC.
- ExPaNDS?

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Filters

Data Type

Simulation	521
Experiment	2560
Derived	423

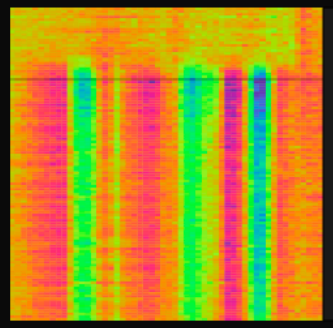
Field

X-Ray Sources	368
Plasma Physics	49
Ion Acceleration	76
Electron Acceleration	85
Material and Biomolecular Applications	122

Technique

X-ray phase contrast imaging	59
X-ray Diffraction	45
X-ray absorption spectroscopy	85
Coherent Diffractive Imaging	26
Atomic, Molecular and Optical Science	736
Soft X-ray Materials Science	48
Pulsed Radiolysis	29
WW pump-probe	47
X-ray Phase contrast imaging	14
X-ray fluorescence	238
Absorption spectroscopy, WDM@10Hz	45

Datasets



Time-resolvent spectroscopy - run 1-52

RP4-SRS focuses on time-resolvent spectroscopy experiments in the full range of frequencies from IR to UV. Users can measure samples as varied as solid state crystals, or proteins in their natural environment. Time-resolved spectroscopy is the collection of techniques that are used to examined the dynamic processes of materials and chemicals upon illumination with a pulsed laser...

Dataset | X-ray Spectroscopy | Pulsed Radiolysis | All Tags 8

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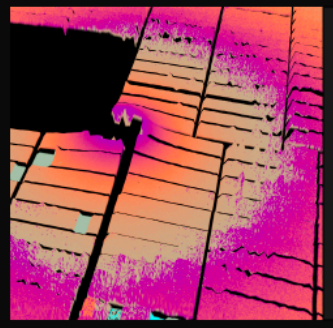
Size 328 MB
Views 3

jupyterlab
launch VM



Two-color XUV+NIR femtosecond photoionization of neon in the near-threshold region

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Dataset | X-ray Spectroscopy | XFEL

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Laser-driven Ion Acceleration from Plastic Target

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Dataset | Ion Acceleration | ELI Beamlines

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launch VM

Electrons accelerated from a thin foil irradiated by an ultra-intense laser

Created 2021/11/03

PaNOSC

The Photon and Neutron Open Science Cloud (PaNOSC)

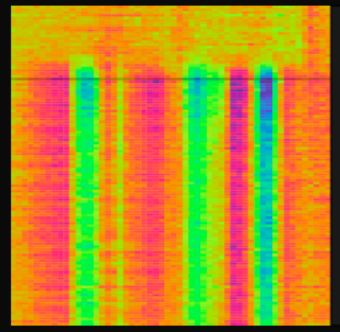
The Photon and Neutron Open Science Cloud (PaNOSC) is a European project (financed by the INFRAEOSC-04 call) for making FAIR data a reality in 6 European Research Infrastructures (RIs), developing and providing services for scientific data and connecting these to the European Open Science Cloud (EOSC).

Objectives

- Participate in the construction of the EOSC by linking with the e-infrastructures and other ESFRI clusters.
- Make scientific data produced at Europe's major Photon and Neutron sources fully compatible with the FAIR principles.
- Generalise the adoption of open data policies, standard metadata and data stewardship from 15 photon and neutron RIs and physics institutes across Europe
- Provide innovative data services to the users of these facilities locally and the scientific community at large via the European Open Science Cloud (EOSC).
- Increase the impact of RIs by ensuring data from user experiments can be used beyond the initial scope.
- Share the outcomes with the national RIs who are observers in the proposal and the community at large to promote the adoption of FAIR data principles, data stewardship and the EOSC.

READ MORE

My Datasets



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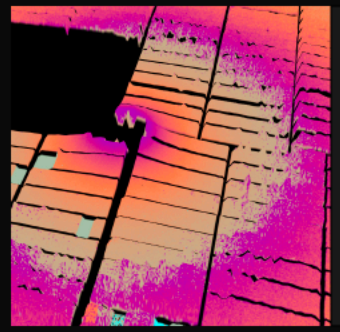

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Dataset | Ion Acceleration | ELI Beamlines

Created 2021/11/03
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launch VM

Dashboard

New Messages 1

Alice Fischer Analysis of experiment at ESRF

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GO TO MESSAGES

Resources

72 CPU-hours used — 0 — 72 — 140 — REQUEST MORE

15 GPU-hours used — 0 — 15 — 20 — REQUEST MORE

WP4

- Mockups (previous 2 slides)
- We need to provide API, using panosc metadata format
- We need to know what fields WP4 (+ExPANDS) need to use the data (scientific technique, units, NeXus info, calibration files/ location)
-

EOSC Photon and Neutron Data Services

panosc

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How to aggregate facility results

- Score for each facility relevance?
- Combine scores at end?
- Randomize list?
- Interleave search results?
- User should be able to sort results
- Partition searches so laser, X-ray, neutrons go only to relevant institutes
- Option for user to select to restrict by facility type/field

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