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ExPaNDS - The benefit of Open Data

Thursday, 8 September 2022 20:15 (20 minutes)

We would welcome the opportunity to take part in the presentation abstract session to highlight "The benefits of Open Data".

Using Photon and Neutron (PaN) sources to investigate samples of matter at molecular or atomic level apply to extremely diverse science domains, ranging from chemistry and life science to palaeontology and art history. The scientific community represented by PaNOSC for European Research Infrastructures (RIs) and ExPaNDS for national RIs is extremely wide-ranging rich, as it embraces over 30,000 researchers, but due to the diverse character of their sciences it is also extremely fragmented.

ExPaNDS is the European Open Science Cloud (EOSC) PaN Data Service. The ambitious project will create enormous opportunities for the Photon and Neutron Research Infrastructures (PaN RIs) and through their findings for humankind across the globe. This will be achieved through the collaboration and federation of 10 national PaN RIs from across Europe based on the EOSC services in partnership with EGI, and will become a game-changer for the scientific user community. ExPaNDS will make the majority of PaN RIs data 'open' following the FAIR principles (Findable, Accessible, Interoperable, Reusable) according to the user's needs, and to harmonise efforts to migrate facility's data analysis workflows to EOSC platforms enabling them to be shared in a uniform way.

The goal of our projects and the EOSC is to make data from publicly funded research in Europe Findable, Accessible, Interoperable and Reusable (FAIR). Fostering FAIR data practices will allow other facilities and their users to benefit from the valuable data produced thanks to our light and neutron sources. By reusing data, it is possible to plan experiments and simulations that will produce more than was originally imagined.

ExPaNDS sees EOSC as an opportunity to generalise the adoption of FAIR data practices at our PaN RIs that will enable data sharing, the reuse across a wider community and the provisioning of services for remote data analysis. We will map all relevant data catalogues to ensure that our scientific research communities have access to both the raw data collected that is linked to the experiments at their facility, and the relevant peer review articles produced as a direct result of their usage.

We are keen to engage with scientists who are interested in "Open data", those who believe that open data will provide new opportunities for our PaN community and science in general. Those wanting to support that open data could be freely used, re-used and distributed to advance knowledge and help to combat 21st century problems. We would also like to showcase a number of use cases which highlight exactly these benefits of open data.

Would you like to participate in the Poster Prize competition?

No

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Session Classification: List of posters presented during the conference