

Title: Maximizing Scientific Output through Data FAIRness

Authors: Fredrik Bolmsten, Massimiliano Novelli

Abstract:

The European Spallation Source (ESS) has set the ambitious goal to implement the FAIR principles (Findability, Accessibility, Interoperability, and Reusability) to all scientific data acquired and produced under its umbrella. In this talk, we will discuss ESS approach to FAIR data management and its integration with the PaNOSC (Photon and Neutron Open Science Cloud) data portal to support a collaborative and data-driven scientific ecosystem. The PaNOSC project, a European initiative to provide open data services to photon and neutron research infrastructures, offers through its data portal a central platform for the sharing and discovery of open data across facilities. It aims to become the central place for researchers to discover previous experiments and related data, and open data in general.

We will explore the strategies employed by ESS to ensure data FAIRness. They include understanding of the scientific domain, familiarity with the acquisition technologies, tight collaborations with stakeholders, robust metadata standards, automated data capture, and adherence to open data policies, which allow for seamless data integration with the PaNOSC portal, and potentially with other data services. We will also discuss the role of the PaNOSC data portal, and similar initiatives, in enhancing data discoverability and scientific output.

Attendees will gain insights into how to leverage multiple strategies to foster an open-science environment and enable international cross-facility data sharing that supports scientific advancement. This talk will be valuable for researchers, data managers and IT professionals interested in adopting FAIR principles within their projects and exploring practical applications of open science data platforms.

Thank you so much for your attention

Max

Massimiliano (Max) Novelli

Senior Data Curation Scientist

SIMS team

European Spallation Source ERIC

Data Management and Software Centre

Asmussens Allé 305, 2800 Lyngby, Denmark

Mobile: +45 25 50 39 38

E-mail: Max.Novelli@ess.eu