13th Technical Meeting on Plasma Control Systems, Data Management and Remote Experiments in Fusion Research

Contribution ID: 58

Type: Oral

## **FAIR4Fusion - Making Fusion Data FAIR**

Tuesday 6 July 2021 15:40 (10 minutes)

FAIR data, that is making data findable, accessible, interoperable and reusable, is becoming increasingly adopted across a number of disciplines for many reasons. Within the fusion community, at least with regards to experimental data, while each site has elements of the FAIR principles, there is a lack infrastructure providing harmonised search and access mechanism for data at multiple sites. The goal of the FAIR4Fusion project is to develop demonstrators to realise the benefit of a community based FAIR approach to metadata integration and design a blueprint architecture for a fully featured service meeting all of the gathered user requirements, plus additional requirements based on the demonstrators and extending to not only cover experimental data, but also modelling and simulation data. In this talk, we introduce the FAIR concepts and how we anticipate this can be applied across the community while still maintain each sites autonomy and existing infrastructures and processes. We also show how this can be achieved, at least within the scope of this project, by building upon existing work already performed by the community, reducing the costs for implementation, and describe efforts to generalize this to improve both scalability and performance. We also introduce the initial blueprint architecture and seek to elicit input from the audience to provide additional requirements.

## **Speaker's Affiliation**

UKAEA

## Member State or IGO

United Kingdom

**Primary authors:** DE WITT, Shaun (UKAEA); COSTER, David (Max Planck Institute for Plasma Physics); IM-BEAUX, Frédéric (CEA-IRFM); Mr PLOCIENNIK, Marcin (Poznan Supercomputing and Networking Center, IBCh PAS); Dr KLAMPANOS, Iraklis (NCSRD); STRAND, Par (Chalmers University of Technology)

Presenter: DE WITT, Shaun (UKAEA)

Session Classification: Database techniques for Information

Track Classification: Database Techniques for Information Storage and Retrieval