OPAL
Ontology Portal for Astronomy Linked-data

OSCARS
Open Science Clusters' Action for Research & Society

The OPAL project aims to advance the semantic infrastructure for astronomy by creating an ontology portal, as a centralised repository for vocabularies and ontologies. In collaboration with the OntoPortal Alliance, the project will expand the use of International Virtual Observatory Alliance – IVOA's vocabularies across astronomy and neighbouring fields, enhancing data sharing, reuse, and interdisciplinary collaboration.

ENVRI
Environmental Sciences

ESCAPE
Astronomy, Nuclear and Particle Physics

Challenge

The astronomy community is recognised for its Virtual Observatory infrastructure - IVOA, which enables interoperability and, in turn, smooth data sharing and reuse within this ecosystem. A key piece of this interoperability framework is the development and maintenance of vocabularies, which are still siloed in the IVOA framework.

Solution

Design and setup of an ontology portal as a centralised Semantic Artefact Catalogue (SAC) for astronomy. OPAL will establish the OntoPortal instance for astronomy, which will collect vocabularies and other semantic artefacts from the areas in the ESCAPE Science Cluster

Scientific Impact

By enhancing the semantic infrastructure of astronomy, the ontology portal will enable researchers to discover and use data more efficiently through standardised vocabulary and ontology resources.

Partners

INRAE, OBS-PARIS

https://www.oscars-project.eu/projects/opal-ontology-portal-astronomy-linked-data