



# OSCARS

Open Science Clusters' Action  
for Research & Society

## Kick-Off Meeting - Cluster presentations



Funded by  
the European Union

## Two EOSC projects for PaN : PaNOSC and ExPaNDS



### Photon (LEAPS)



### Neutron (LENS)

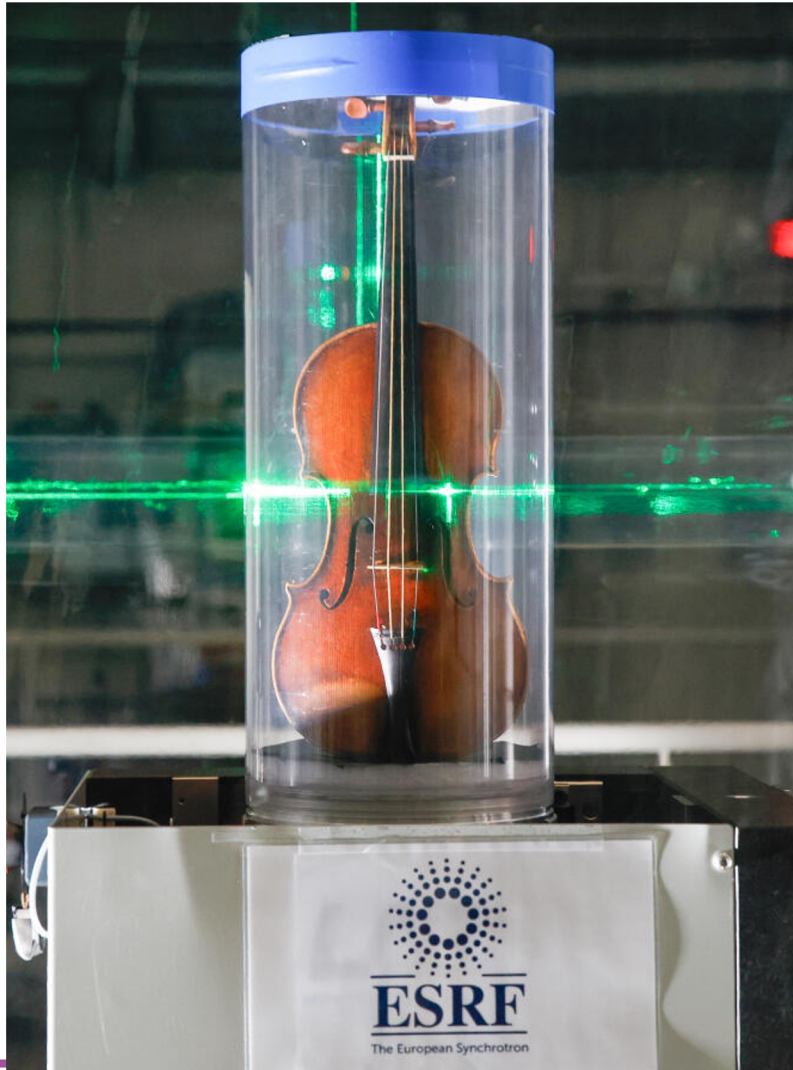


<https://www.panosc.eu/>

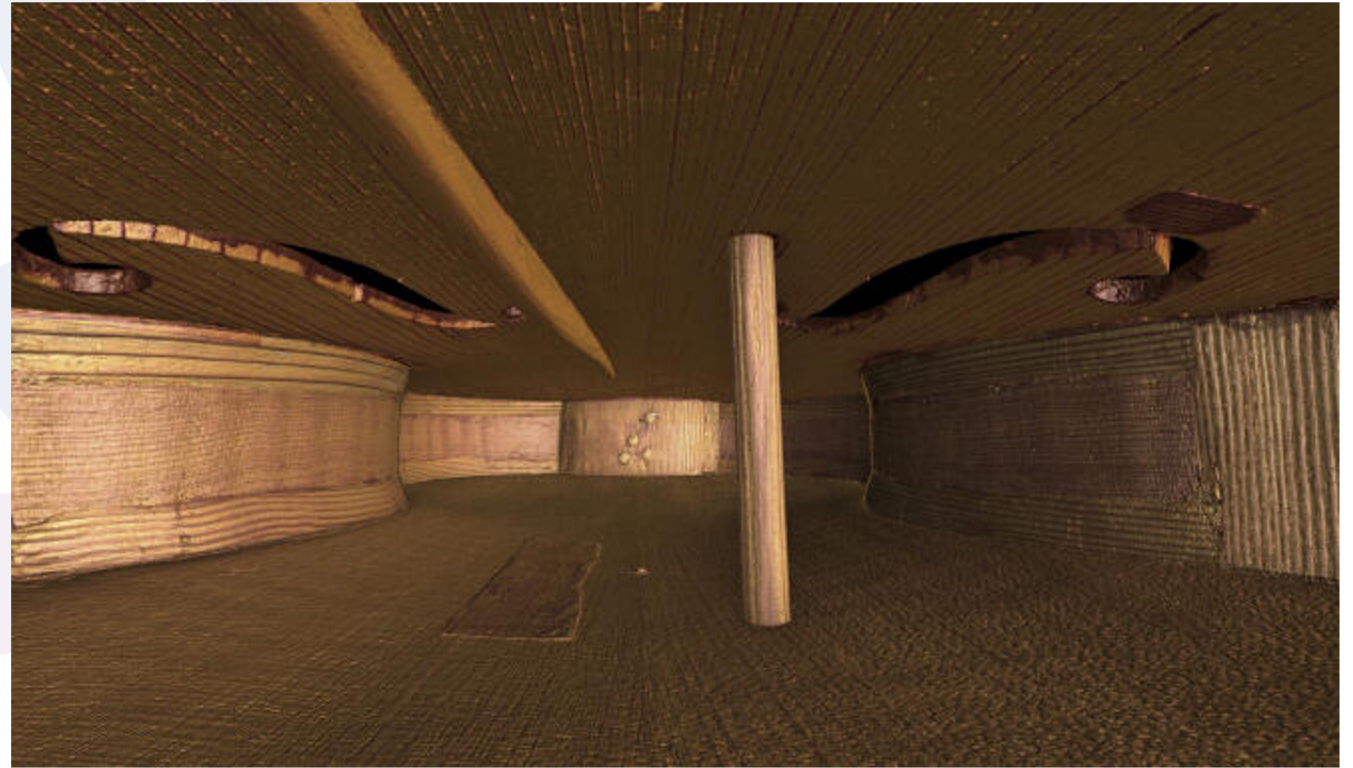


PaNOSC and ExPaNDS projects have received funding from the European Union's Horizon 2020 research and innovation programme under grant agreements 823852 and 857641, respectively.

- PaNOSC covers all Photon and Neutron sources in Europe
- Previously 2 projects (ExPaNDS and PaNOSC) and now only one → PaNOSC
- Representing the LEAPS + LENS organisations
- Producers of petabytes of data in wide range of scientific disciplines



- **Paganini's violin "Il Cannone"** - BM18 HiP-CT 3d scan down to the cellular level at the ESRF in March 2024 generated 20 terabytes of high quality data



# 10 main PaNOSC outcomes need to be sustained and consolidated in OSCARS

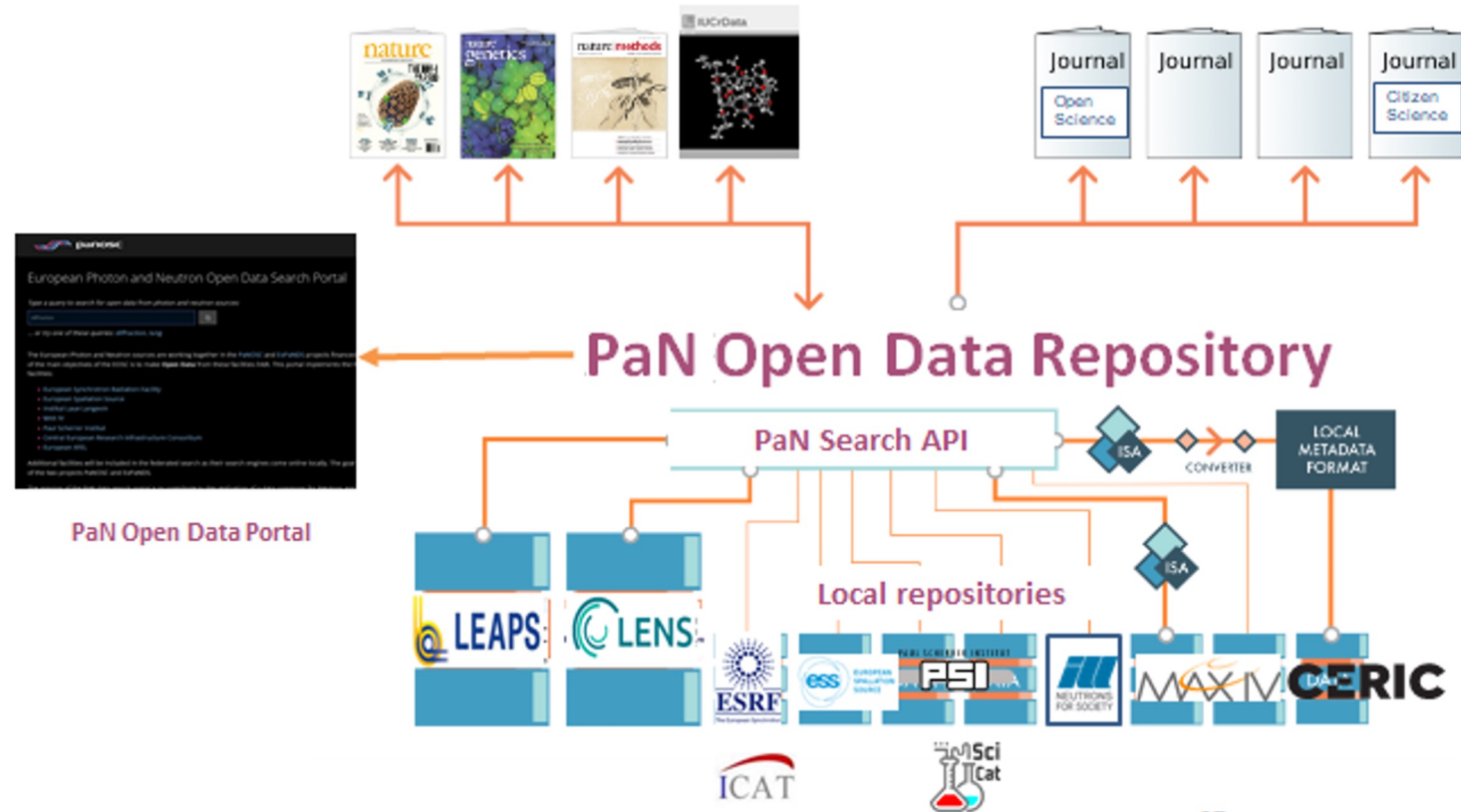
## Collaboration opportunities with other clusters

- Share FAIR tools → 1. FAIR data policy and DMPs – 90% of PaN RIs (15)
- Share ontologies → 2. Standardised metadata (Nexus/HDF5) – ALL PaN RIs (18)
- Share search engines → 3. Federated search API for PaN data catalogues – 8+2PaN RIs
- Link to data portals → 4. Open Data portal for FAIR data – 8 PaNs RIs
- Use common AAI → 5. Community AAI UmbrellaId – 90% PaN RIs (15)
- Share plugins → 6. JupyterLab notebooks service - 90% PaN RIs, 100s users daily
- Share web viewer → 7. Nexus/HDF5 web visualization – ALL PaN RIs, 1000s worldwide
- Share VREs → 8. Remote data analysis with VISA – 8 PaN RIs, 100s users monthly
- Software quality → 9. Simulation software (ViNYL) – 4 PaN RIs, 10s users monthly
- Share learning material → 10. PaN-learning platform (pan-learning.org) – 100s users monthly

## Vision : Create new kind of User community – PaN Open Data User Community

1. Open Data are findable via one portal
2. Users can analyse the Open Data on their own or request “Data-Time” for help
3. Users can learn, train, analyse, verify, publish

## Open Data from federated PaN Repositories



Collaborate with journals e.g. IUCr

In addition to all the competences and services the main benefit will be:

**Implement the other 50% of FAIR for PaN data to make the 100% FAIR, i.e.**  
**re-usable and re-used**  
**by humans and machines**

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OSCARS

Thank you