



OSCARS

Open Science Clusters' Action
for Research & Society

Funded Project

PaN-Finder



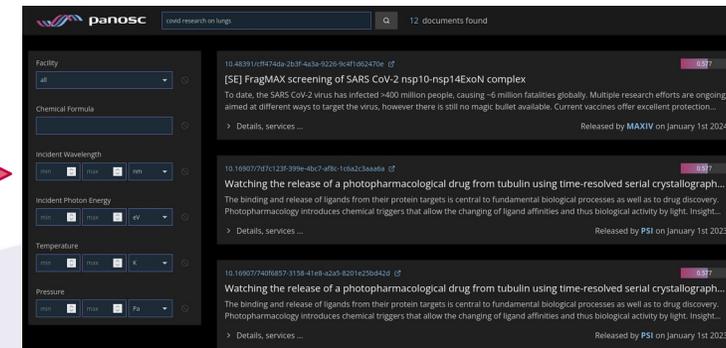
Presenter: **Massimiliano Novelli**, European Spallation Source, *0000-0003-2818-0368*

Implemented by



Funded by
the European Union

What problem(s) did you plan to solve?



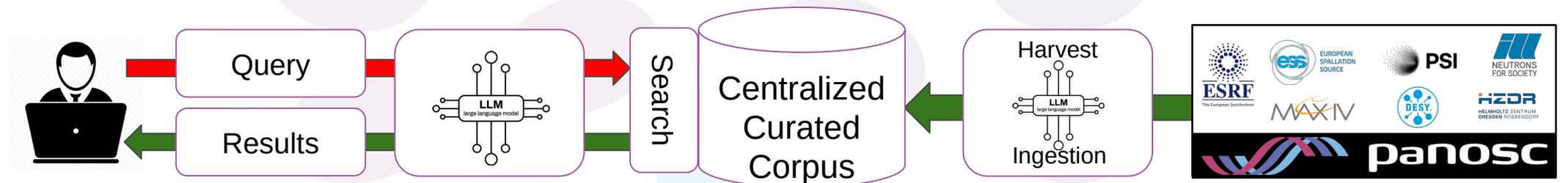
Significantly increase *findability* and *reusability* of open data available in the federated Photon and Neutron data catalogue

Overcoming the limitations of legacy experimental data heterogeneously curated

What have you done to solve the problem?

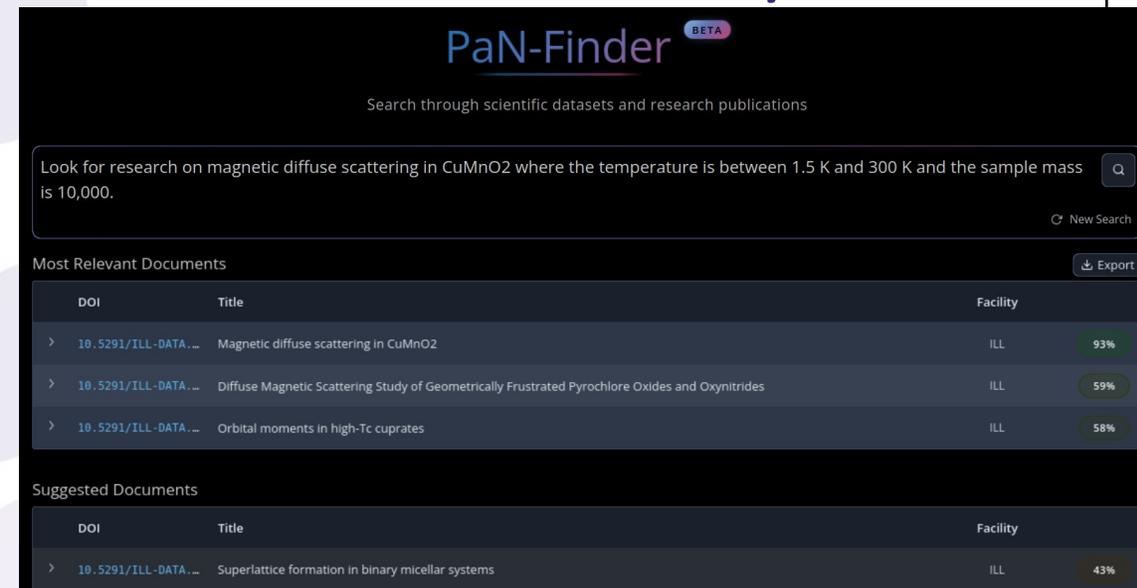
Develop an AI assisted prompt based search system

- Harvest publicly available data and related metadata
- Curate corpus with the assistance of AI tools
- Leverage AI tools to:
 - Interpret correctly the users' requests
 - enhance searches
 - provide meaningful responses



What are the key results achieved to date and how have you made them available to the broader community?

- Strategies and code implementation to:
 - collect / ingest heterogeneous data
 - search ingested data
- A public facing application:
<https://pan-finder.panosc.ess.edu>
- Methodology to collect user feedback



PaN-Finder ^{BETA}

Search through scientific datasets and research publications

Look for research on magnetic diffuse scattering in CuMnO₂ where the temperature is between 1.5 K and 300 K and the sample mass is 10,000.

New Search

Export

Most Relevant Documents

DOI	Title	Facility	
> 10.5291/ILL-DATA...	Magnetic diffuse scattering in CuMnO ₂	ILL	93%
> 10.5291/ILL-DATA...	Diffuse Magnetic Scattering Study of Geometrically Frustrated Pyrochlore Oxides and Oxynitrides	ILL	59%
> 10.5291/ILL-DATA...	Orbital moments in high-T _c cuprates	ILL	58%

Suggested Documents

DOI	Title	Facility	
> 10.5291/ILL-DATA...	Superlattice formation in binary micellar systems	ILL	43%

- Deliverables repository: *<https://github.com/PaN-Finder/deliverables>*
- Code repository (Public before the end of the project)

**How will you make your results sustainable over time?
How will the scientific communities further exploit them?**

- Best effort
- Resource allocation
- Merge with funded projects



- Infrastructure Maintenance
- Data Maintenance



- Adopting the methodologies in their own projects
- Adopting the code base or relevant portions of it
- Deploying the project on premises with different data

Who has been doing it?

SIMS team at DMSC - ESS

(Scientific Information Management Systems)

Janos Babic

0009-0000-0854-5054



Jekabs Karklins

0000-0003-1355-1488

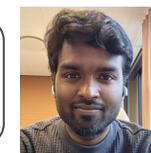


Fredrik Bolmsten

0000-0001-9487-4371



Yoganandan Pandiyan



Junjie Quan



Massimiliano (Max) Novelli

0000-0003-2818-0368

