



**PV 2023**  
CONFERENCE

PV2023: Adding value (to) and preserving  
Scientific & Technical data



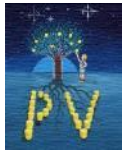
**PV2023**

**Summary and Conclusions**

# The PV Conferences

The PV conference series is about ensuring **long-term Preservation** and **Adding Value to Scientific and Technical Data**

**PV 2002**  
CNES,  
Toulouse



**PV 2004**  
ESA,  
Frascati

**PV 2005**  
DCC,  
Edinburgh

**PV 2007**  
DLR, Munich



**PV 2009**  
ESA,  
Villafranca



**PV 2011**  
CNES,  
Toulouse



**PV 2013**  
ESA, Frascati



**PV 2015**  
EUMETSAT,  
Darmstadt



**PV 2018**  
CEDA,  
Harwell



**PV 2023**  
CERN,  
Geneva



# PV 2023 Conference Objectives

- Address prospects in the domain of scientific and technical data preservation together with value adding to these data.
- Provide a forum for organizations dealing with preservation of own data and value adding to present the status of their activities, plans and expectations.
- Share knowledge, experiences and lessons learned, foster cooperation.

# PV 2023 Conference Themes

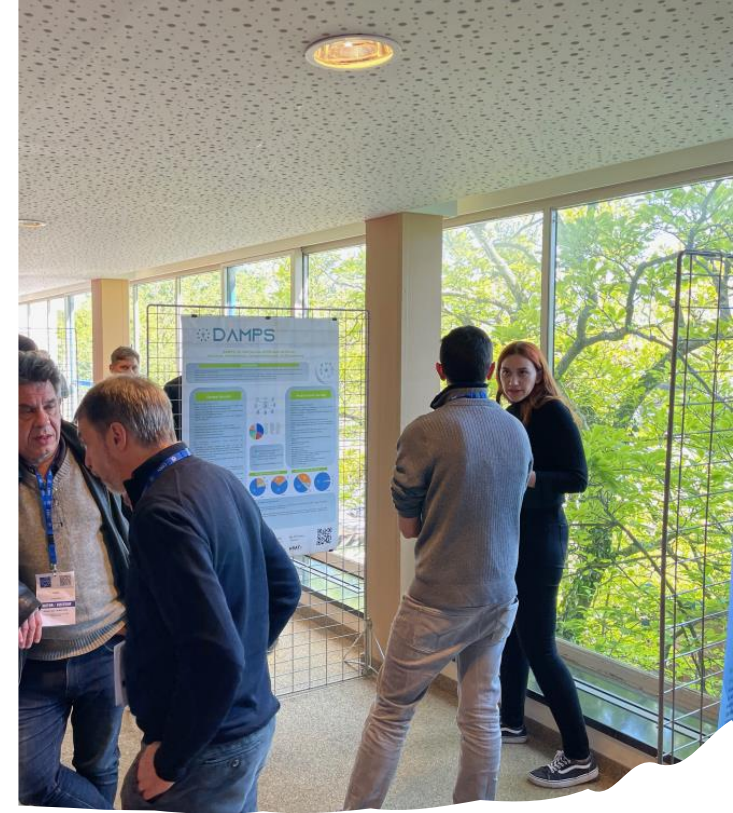
- Theme 1: Ensuring long-term data and knowledge preservation (the "P" in PV)
- Theme 2: Adding value to data and facilitation of data use (the "V" in PV)
- Theme 3: Challenges of incorporating complex policy, technology, standards and principles in Open Data Environments

# PV 2023 Some Numbers

100 + 35 Registered Participants from 12 countries

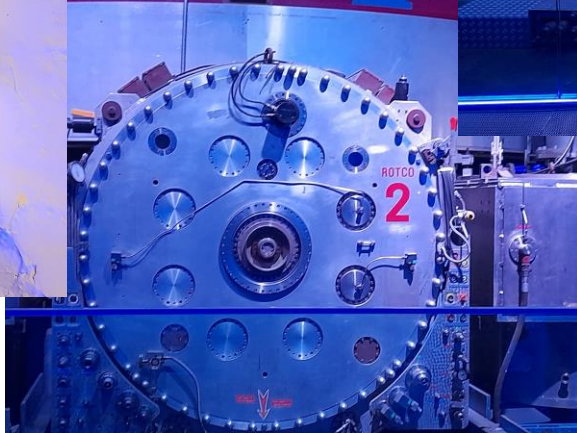
- 52 Oral Presentations
- 24 Posters





**At the end of the day ....**





... visiting the data center and the synchrotron

# PV 2023





# Key points – general

- Promote data stewardship in both scientific content and data science
- Develop ontology services to support long-term data interpretation
- Maintain a copy of data on tape is appropriate for LTAs as low energy storage medium
- Engage other communities in this common conversation: biology, large research infrastructures, materials science  
...

## Key points, Theme 1: Ensuring long-term data and knowledge preservation (the "P" in PV)

- Increasing volume of data and information to be preserved (users want it all). Affordability? Retention policies?
- Preservation to be done during all phases of the project lifecycle (not at the end). Early involvement of data and information preservation and curation experts.
- Development and incorporation of automation to ease the burden of long-term preservation.
- Keep data safe but also usable. Preserve also tools and context information needed to understand and use it. Data rescue is important for furthering knowledge.
- Challenges: diversity of data types and formats, web infrastructure maintenance, knowledge management, software and tools.

## Key points, Theme 2: Adding value to data and facilitation of data use (the "V" in PV)

- Long-term preservation of continuous data streams and data types provides the opportunity to add value – additional metadata, consistency, analysis of gaps and anomalies.
- Continue heritage data recovery effort that builds long time series of harmonised data – extending temporal coverage by generating across-mission time series
- Scalable services from public Clouds are an opportunity for new added value data services. The point of view from funding agencies is very relevant here.
- Moving data services (discovery, download, transformation, analysis) into the cloud: new opportunities but also new challenges

## **Key points, Theme 3:** Challenges of incorporating complex policy, technology, standards and principles in Open Data Environments

- Ability to support open data and science while protecting data integrity/security
- Carbon footprint of data preservation, stewardship and curation vs benefit
- Adoption of community specific ontologies and semantics
- Preservation of software and the processing environment
- Adoption of / migration to new technology
- Collaboration is key: recognized need and benefits of sharing information and lessons learned inside and across domains

# Next PV Conference ..... for discussion

## **PV 2023**

- What did you like?
- What did you not like so much?

## **Next PV Conference**

- Keep the same format and themes?
- More focus on ..... ?
- Any recommendation to be taken on-board?

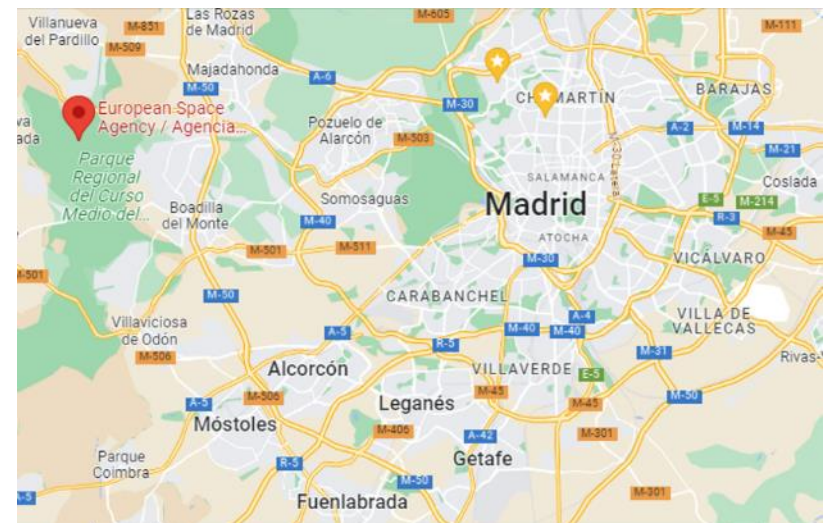
# PV 2026 Conference

Hosted by ESA/ESAC in  
May 2026 in Villanueva de  
la Cañada, Madrid (Spain)





# ESAC – European Space Astronomy Centre





# Thank you to our organizers!

Dirk Duellmann

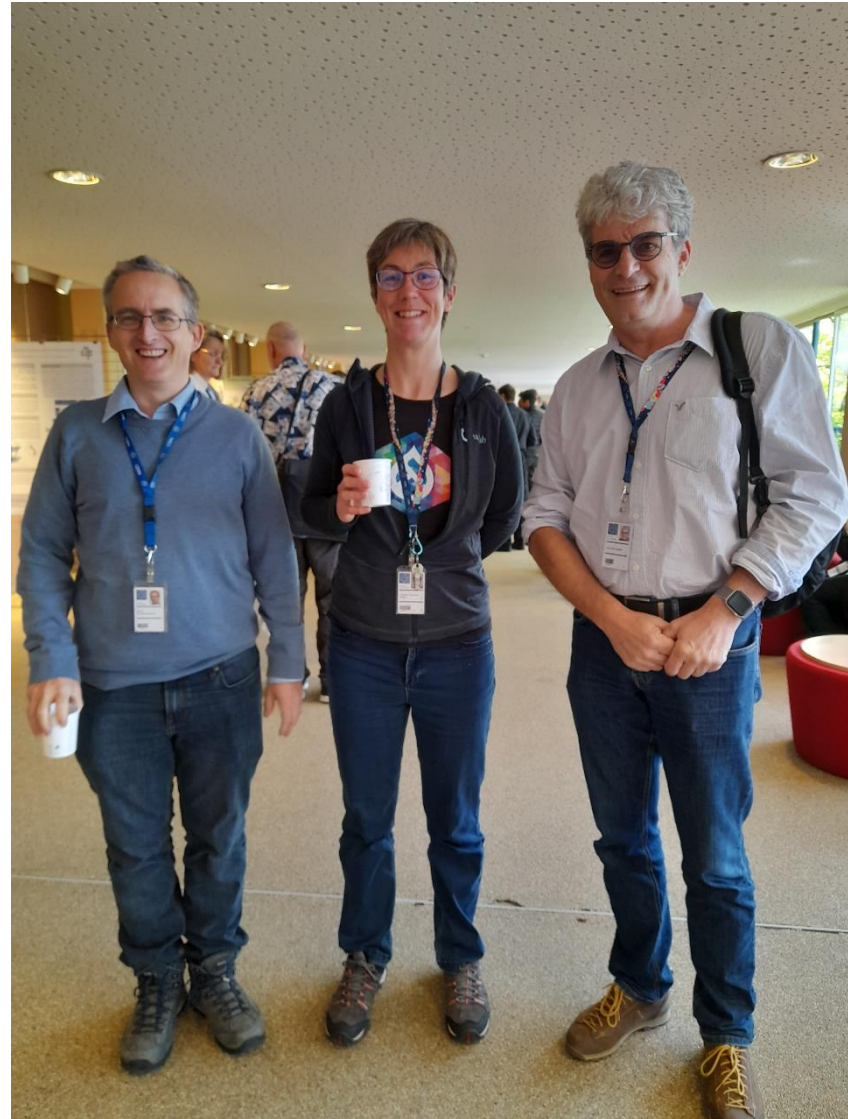
Catherine Noble

Ulrich Schwickerath

... and all the local  
organizers!

Jamie Shears

... and the rest of the  
program committee





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**Thank You !!**