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## Datasets of IPERION CH

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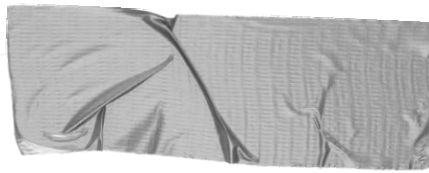
# Datasets of IPERION CH

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Laurent Romary et Marie Puren, Inria (Alpage)

*Avec l'aide de Loic Bertrand, Susanna Holowati, Sophie  
David, Ipanema*



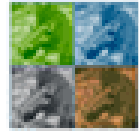


# Intro

IPERION CH : a European project for  
Cultural Heritage

Data management survey

- 2 questionnaires
- Analysing datasets of IPERION CH
- Digital data
- Licensing



IPERION CH

# Integrated Platform for the European Research Infrastructure ON Cultural Heritage

For more information :

<http://www.iperionch.eu/home>

Establishing

a unique European research  
infrastructure for restoration  
and conservation of Cultural  
Heritage

# Horizon 2020 – Work Programme 2014-2015 for European research infrastructures

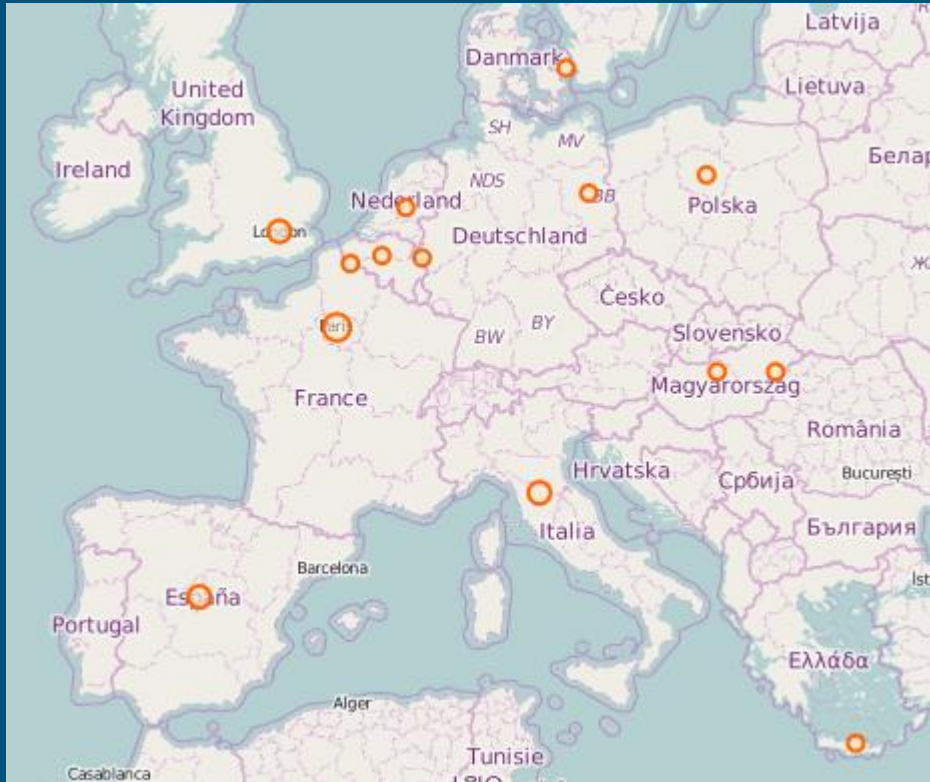
- ❑ 23 partners : Europe + USA  
(Getty Institut)
- ❑ National facilities of excellence
- ❑ Access to scientific instruments,  
methodologies, data and tools for  
the preservation of Cultural  
Heritage.
- ❑ Connecting researchers in the  
Humanities and Natural Sciences
- ❑ Trans-National Access

European partners



Map available with [Dariah Geo-Browser](#)

## Facilities



## Integrated trans-national access platforms :

- ❑ Making scientific tools and knowledge available to Heritage scientists
- ❑ 3 platforms :
  - ARCHLAB
  - FIXLAB
  - MOLAB
- ❑ 19 facilities

# ARCHLAB : access to scientific information in archives, European museums, galleries, research institutions



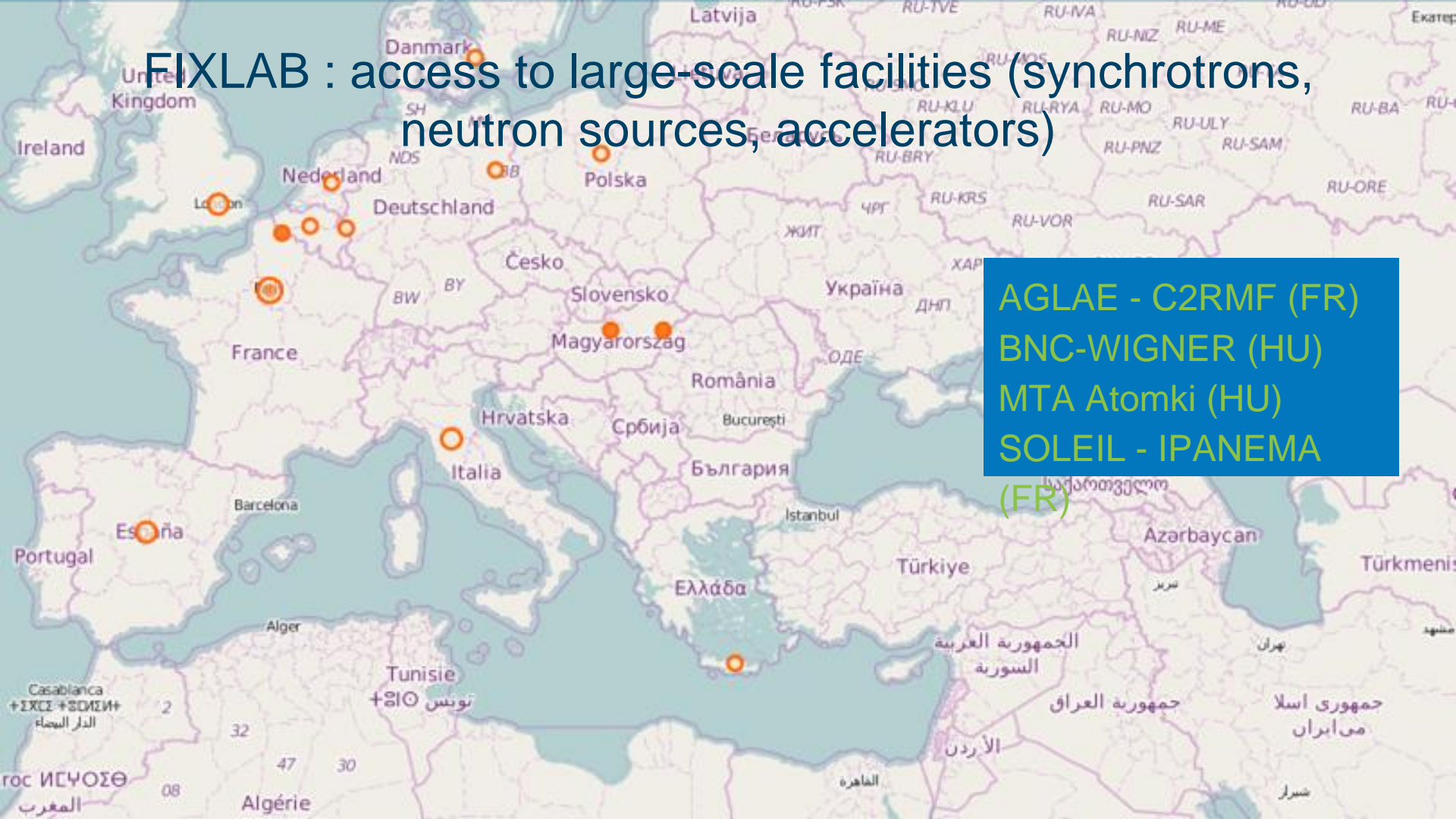
A map of Europe and the Mediterranean region with orange dots marking the locations of various institutions. The dots are located in the following countries: Denmark, Netherlands, Germany, Poland, France, Italy, Spain, and Greece. A blue box on the right side of the map lists the names of these institutions and their respective countries.

- BM (UK)
- C2RMF (FR)
- CATS (DK)
- IPCE (ES)
- KIK-IRPA (BE)
- NG (UK)
- OPD (IT)
- PRADO (ES)
- RCE (NL)
- SPK (DE)



FIXLAB : access to large-scale facilities (synchrotrons, neutron sources, accelerators)

AGLAE - C2RMF (FR)  
BNC-WIGNER (HU)  
MTA Atomki (HU)  
SOLEIL - IPANEMA  
(FR)



# MOLAB : access to a collection of advanced mobile analytical instrumentation for non-invasive measurements



A map of Europe and the Mediterranean region with orange dots indicating the locations of MOLAB facilities. The dots are located in the United Kingdom (London), Netherlands, Germany (multiple locations), France, Spain (Barcelona), Italy (multiple locations), and Greece. A blue box on the right side of the map contains a list of participating institutions and their country codes.

- CNR-INO (IT)
- CNR - ISTM (IT)
- CNRS (FR)
- IESL-FORTH (GR)
- LABDIA (IT)
- NCU (PL)
- RWTH (DE)
- UNIPG (S.M.A.Art) (IT)

# Data management survey:

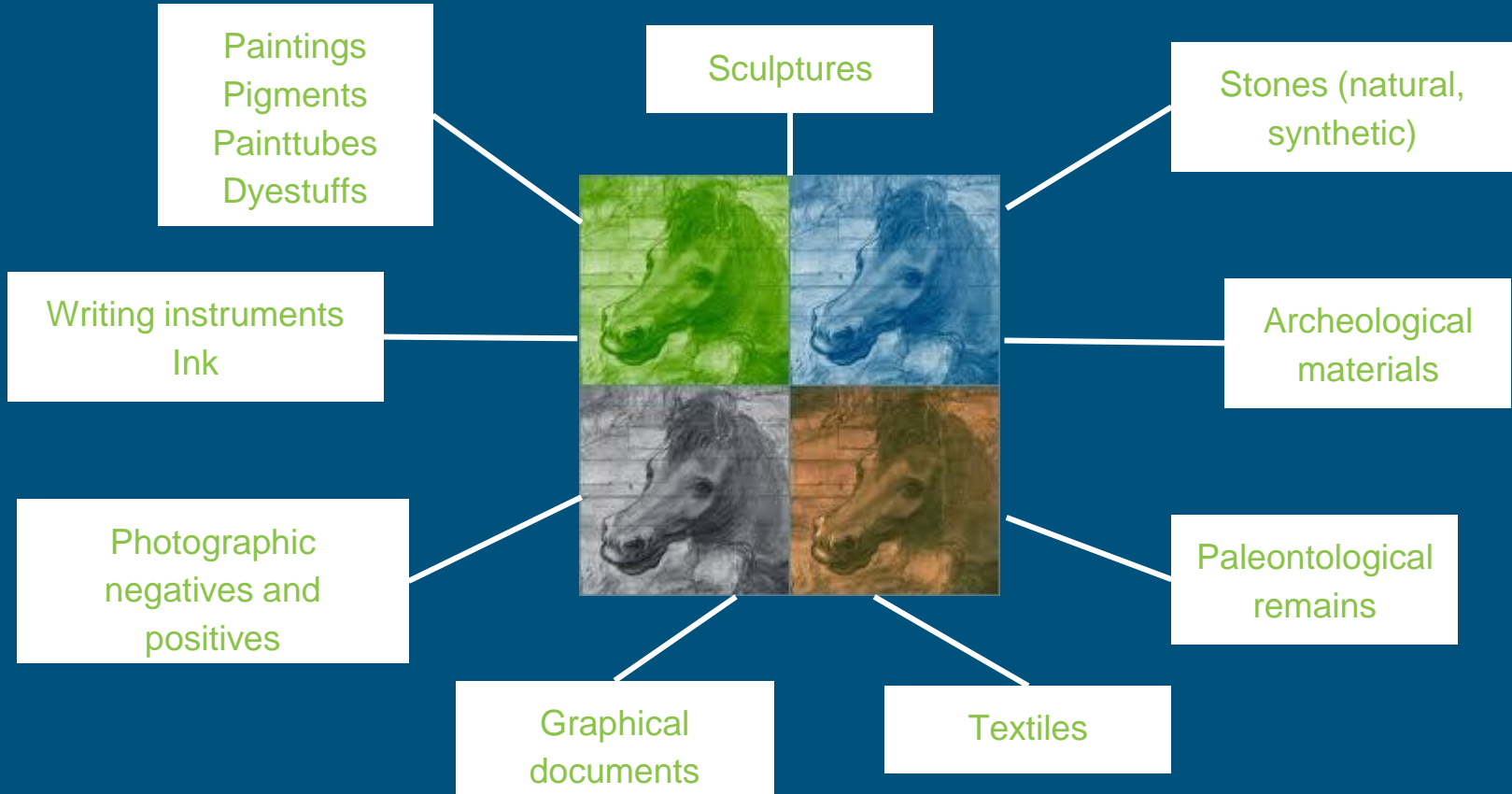
- ❑ 2 questionnaires :
  - 1st : “IPERION CH data management survey for facilities”
  - 2nd : “Questionnaire on data sets of IPERION CH”
- ❑ Results :
  - 78 homogenous datasets (1st questionnaire)
  - 56 precisely described datasets (2nd questionnaire)



3 platforms

19 facilities

Data production  
*Analysed materials*





Data production  
*Methods : examples*

Radiocarbon dating

Accelerator mass spectrometry

Optical and  
electronical  
microscopy

Tomography

Synchrotron  
radiation

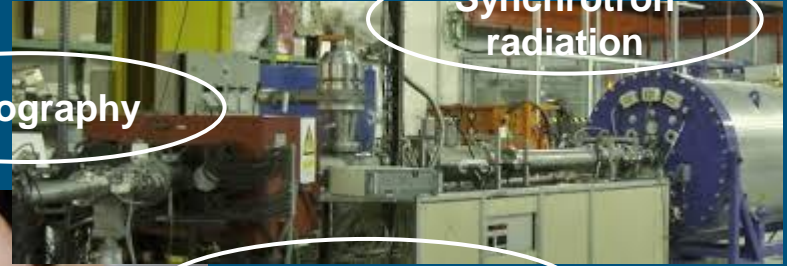
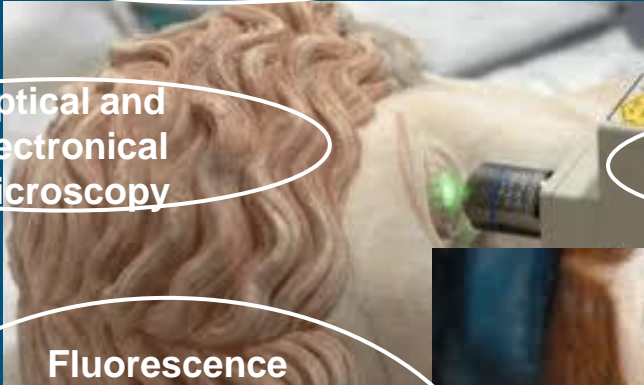
Fluorescence  
spectroscopy  
Fourier transform  
infrared spectroscopy  
(FTIR)  
Raman spectroscopy  
Terahertz time-domain  
spectroscopy (THz-TDS)

X-radiography

Chromatography

Infrared  
reflectography

X-ray fluorescence



# Data types

- ❑ Digital data except :

- “Reports and grey literature collection” (C2RMF)
- “Imaging collection” (C2RMF)

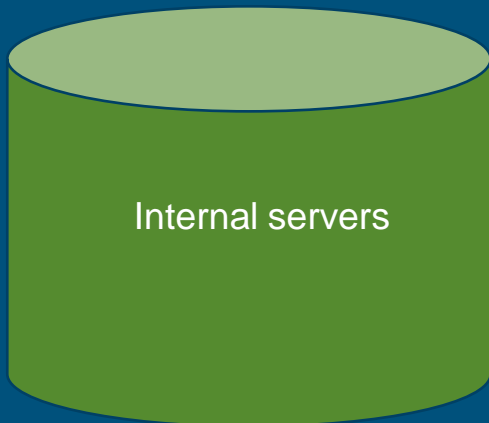
- ❑ Various formats :

Closed formats for  
images and raw  
data (analyses  
results)

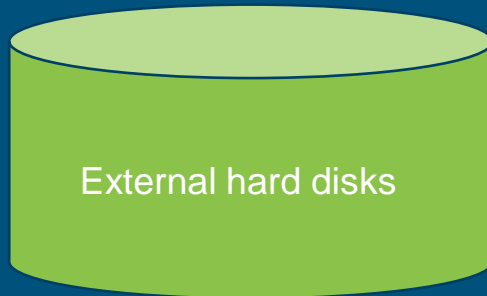
Open formats for  
texts and sounds

# Data hosting

1st solution



2nd solution



Other solutions



## Data access

- ❑ Data producer = data owner
- ❑ Data only available on demand
- ❑ No embargo except if a scientific publication is scheduled



Complying  
with  
copyrights  
and  
intellectual  
property



## Data licensing

- ❑ No license!
- ❑ Only one facility : Royal Institute for Cultural Heritage (BE) uses a licence **Creative Commons 3.0 by-nc-nd** for one dataset
- ❑ 2 facilities are thinking about licensing their datasets:
  - AGLAE-C2RMF (FR) for “Digital reports and grey literature” and “Digital imaging”
  - CATS (DK) for “CATS Reference Collection Database and Digital Documentation”
- ❑ Mutual agreements are preferred





# Conclusion

19 facilities

78 homogenous datasets

Various materials and analyses  
methods

Closed formats for raw data

No licenses