

Datasets of IPERION CH

Laurent Romary, Marie Puren

► **To cite this version:**

Laurent Romary, Marie Puren. Datasets of IPERION CH. Atelier interdisciplinaire “ Matériaux du patrimoine et patrimoine matériel ”, Mar 2016, Palaiseau, France. <hal-01289058>

HAL Id: hal-01289058

<https://hal.inria.fr/hal-01289058>

Submitted on 24 Mar 2016

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



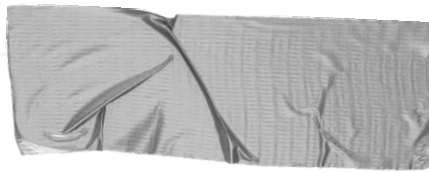


Datasets of IPERION CH

Laurent Romary et Marie Puren, Inria (Alpage)

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



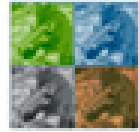


Intro

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

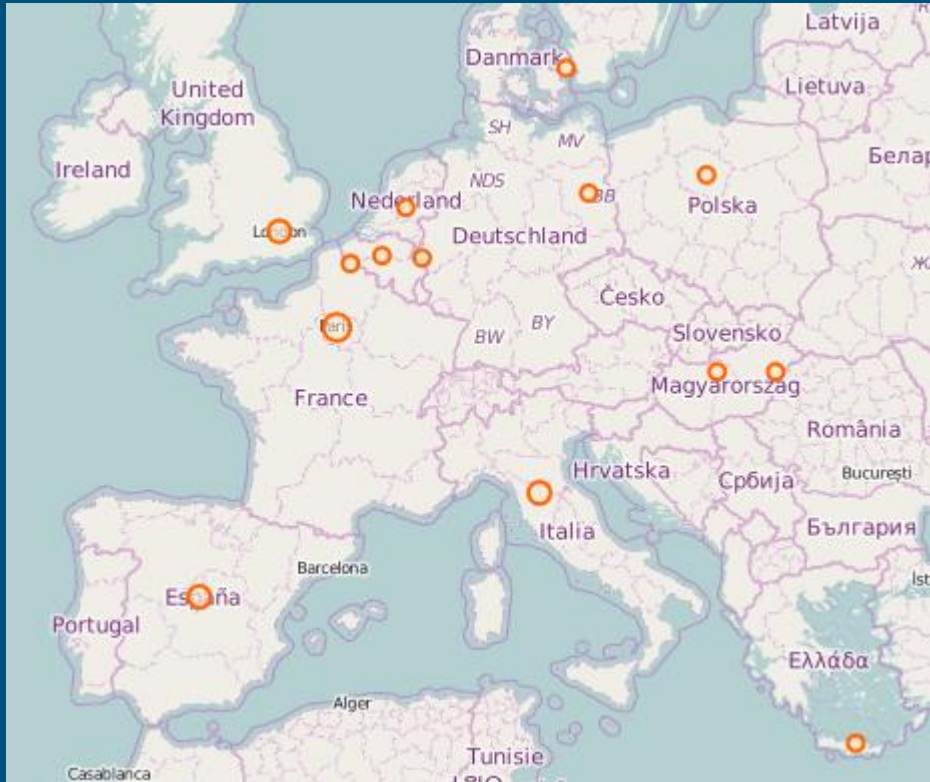
- ❑ 23 partners : Europe + USA
(Getty Institut)
- ❑ National facilities of excellence
- ❑ Access to scientific instruments,
methodologies, data and tools for
the preservation of Cultural
Heritage.
- ❑ Connecting researchers in the
Humanities and Natural Sciences
- ❑ Trans-National Access

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

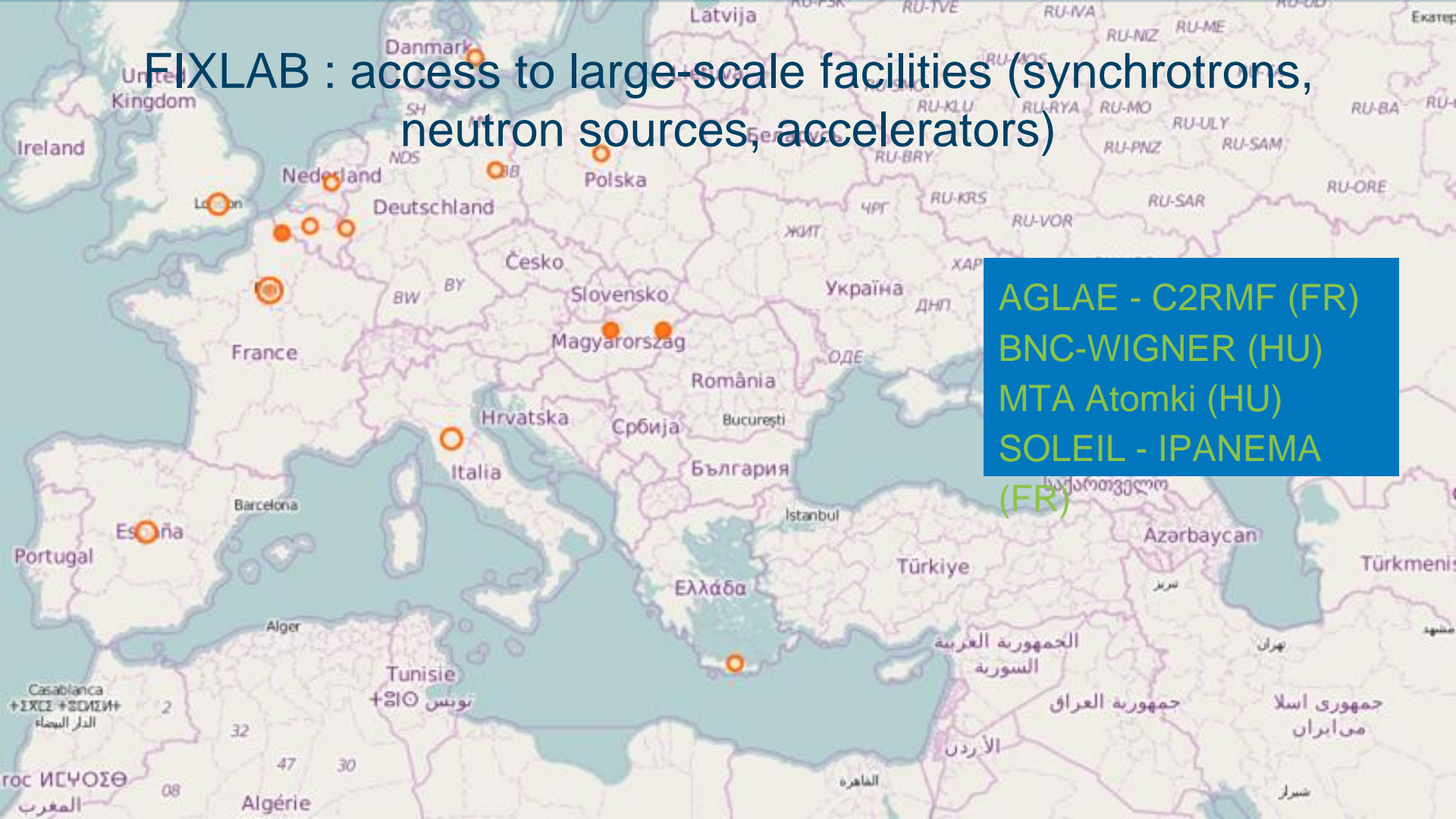


A map of Europe and the Mediterranean region with orange dots marking the locations of various institutions. The dots are located in the UK, France, Germany, Poland, Czech Republic, Slovakia, Hungary, Italy, Spain, Greece, and Turkey. A blue box on the right side of the map lists the names of these institutions and their country codes.

- 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 following countries: United Kingdom (London), Netherlands, Germany (multiple locations), Poland, France, Italy (multiple locations), Spain (Barcelona), Greece, and Turkey (Istanbul). 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:

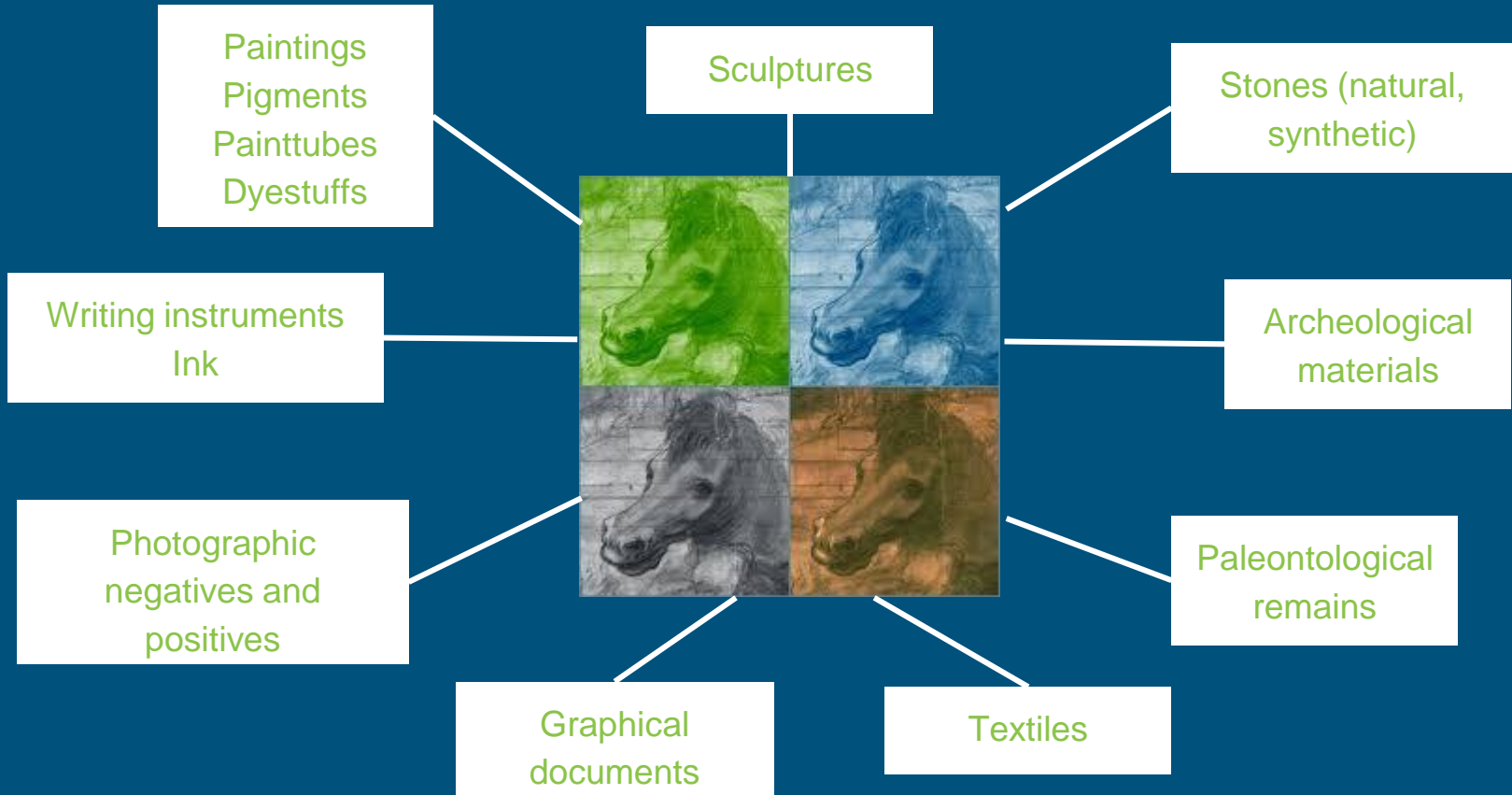
- ❑ 2 questionnaires :
 - 1st : “IPERION CH data management survey for facilities”
 - 2nd : “Questionnaire on data sets of IPERION CH”
- ❑ Results :
 - 78 homogenous datasets (1st questionnaire)
 - 56 precisely described datasets (2nd questionnaire)



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)

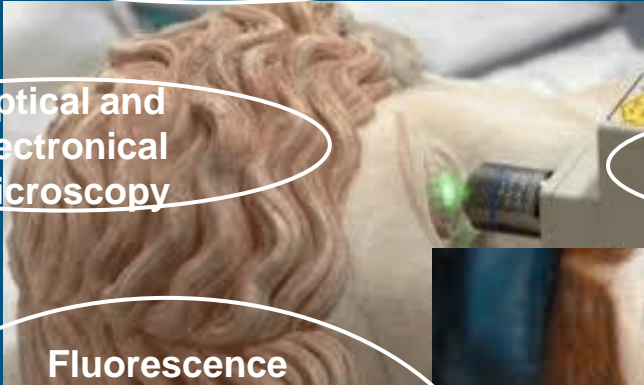
Raman spectroscopy
Terahertz time-domain
spectroscopy (THz-TDS)

X-radiography

Chromatography

Infrared
reflectography

X-ray fluorescence



Data types

- ❑ Digital data except :

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

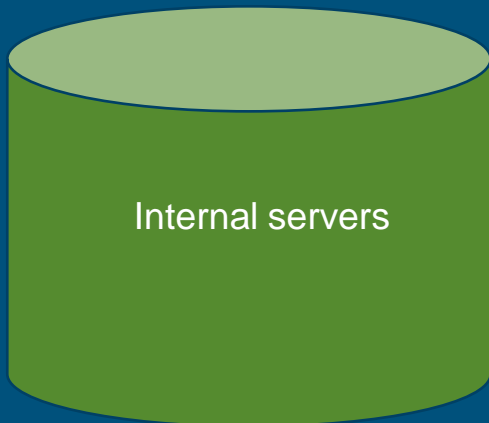
- ❑ Various formats :

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