

# IPERION HS: Transnational Access for Heritage Science at the high-technology facility SOLEIL.

## The IPERION HS project in a few words

Promoting heritage science is the goal of the EU-funded IPERION HS project.

The project has established an Integrating Activity for a distributed pan-European research infrastructure, opening key national research facilities of recognised excellence in heritage science.

IPERION HS offers to the users (from experienced to new users) **free-of-charge Transnational Access** (TNA) to a wide range of **high-level scientific instruments**, best practices and methodological approaches, data, tools and technologies for advancing knowledge and innovation in the field of heritage science.

## Synchrotron SOLEIL in IPERION HS

The [synchrotron SOLEIL](#) is one of the French access providers of the IPERION HS project. SOLEIL is a 3rd generation **synchrotron radiation source**, operating at an energy of 2.75 GeV and stored beam currents (top-up injection) of 500mA and producing extremely powerful light that allows the exploration of matter. As a high-technology facility and research laboratory, SOLEIL is a **platform open to all scientific and industrial communities**.

Three beamlines are accessible through the IPERION HS project: **DIFFABS**, **DISCO** and **PUMA**, offering a wide range access to analytical tools using X rays or UV-vis wavelength. These beamlines enable direct analysis of cultural heritage objects and works of art, archaeological artefacts, palaeontological and paleo-environmental specimens, as well as microsamples.

**DISCO:** VUV to visible beamline dedicated to biochemistry, chemistry and cell biology.

- [DEEP ULTRAVIOLET MICROPHOTOLUMINESCENCE \(DUPV PL\)](#)

**DIFFABS:** Combining X-ray techniques to study a large variety of materials.

- [SYNCHROTRON MICRO X-RAY DIFFRACTION \(SR  \$\mu\$ XRD\)](#)
- [SYNCHROTRON X-RAY FLUORESCENCE \(SR-XRF\)](#)
- [X-RAY ABSORPTION NEAR EDGE STRUCTURE \(XAS\)](#)

**PUMA:** Hard X-ray imaging beamline optimized for the scientific communities of the heritage sciences.

- [SYNCHROTRON MICRO X-RAY DIFFRACTION \(SR  \$\mu\$ XRD\)](#)
- [SYNCHROTRON X-RAY FLUORESCENCE \(SR-XRF\)](#)
- [X-RAY ABSORPTION NEAR EDGE STRUCTURE \(XAS\)](#)

## How to submit a proposal?

The application for access to SOLEIL must be made on the [IPERION HS website](#), through IPERION-HS application form with detailed information about eligibility and evaluation procedures. Proposals can be submitted at any time, with two evaluation cut-off deadlines a year. Before submitting a proposal, the users are strongly encouraged to contact the User Helpdesk to discuss both the administrative and scientific issues on how to prepare it. and to contact also SOLEIL beamline managers prior submission. Complementary [SOLEIL information](#).



## Apply before the end of the next call!

**DEADLINE = February 28th, 2023**



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Contacts & infos:

[IPERION HS User Helpdesk](#)

[IPERION HS access policy](#)

[SOLEIL User Office](#)

Find more about [IPERION HS](#).