360 Carla
Energy & Sustainability

Training

Milan

Photonics for Cultural Heritage

Dates.

17 April, 8 May & 15 May 2026

Venue.

Politecnico di Milano, Physics Department, *ArtIS Lab*
Università degli Studi di Milano-Bicocca, Material Science Department, *Lambda Lab*
Università degli Studi di Milano, Physics Department, *Diart Lab*

Audience.

University students and early stage researchers.

Registration.

Register before 13 April, 2026

www.carlahub.eu

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Funded by

PHOTONICS 21
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In collaboration with

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Description.

Can science uncover the hidden secrets of works of art?

In this training, we will explore how photonics and advanced imaging techniques are transforming the study of cultural heritage.

Using tools such as hyperspectral imaging (HSI), XRF mapping, and radiography, we will learn how to look beneath the surface of a painting, revealing its underlying structure, materials, and the artist's creative process.

This interdisciplinary journey bridges physics, chemistry, and art history, offering a unique perspective on how cutting-edge technology can illuminate the past.

The training will take place into the laboratories of three different research units, ArtIS lab at POLIMI, Lambda Lab at UniMiB, DIART at UniMi, where the same painting will be analyzed with different photonics-based techniques. Focus will be given at understanding complementarity between methods.

- **17 April - POLIMI** - Diffuse reflectance and UV-induced fluorescence HSI
- **8 May** - **UniMiB -** XRF mapping + VIS-NIR-SWIR HSI
- **15 May** - **UniMi** - Point-based reflectance spectroscopy + X-ray imaging

Attendance to all three modules **is not mandatory**, although is encouraged.

Program

17 April 2026
ArtIS Lab @POLIMI, Via Colombo 40

9:00-10:00	Theory behind the technique
10:00-12:00	Experimental session
12:00-13:00	Data Analysis

15 May 2026
DIART Lab @UniMi, Via Celoria 16, Milan

9:00-10:00	Theory behind the technique
10:00-12:00	Experimental session
12:00-13:00	Data Analysis

8 May 2026
Lambda Lab @UniMiB, Building U5, Via R. Cozzi 55

9:00-10:00	Theory behind the technique
10:00-12:00	Experimental session
12:00-13:00	Data Analysis

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