



ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA | DEPARTMENT  
OF MATHEMATICS



BOLOGNA  
JUNE 9-17, 2026

INTERNATIONAL PH.D. SUMMER SCHOOL

# MATHEMATICS AND MACHINE LEARNING FOR IMAGE ANALYSIS

Courses and lecturers:

*Regularisation and learned regularization for inverse problems*

**Martin Burger**

DESY and Universität Hamburg - Germany

*Multi-resolution in image analysis*

**Barbara Pascal**

CNRS LS2N, Nantes Université - France

*Optimization-based machine learning for computational imaging*

**Nelly Pustelnik**

CNRS, Laboratoire de Physique de l'ENS Lyon - France

*Frequency-domain and sparsity in signal/image analysis*

**Ivan Selesnick**

New York University - US

*A mathematical approach to machine learning in imaging*

**Xue-Cheng Tai**

NORCE, Bergen - Norway



Organization:  
**Luca Calatroni**  
UNIGE, Italy

**Marco Donatelli**  
UNINSUBRIA, Italy

**Alessandro Lanza**  
UNIBO, Italy

**Serena Morigi**  
UNIBO, Italy

**Marco Prato**  
UNIMORE, Italy

**Matteo Santacesaria**  
UNIGE, Italy

42 hours - 4 ECTS

Students Funding: 

Detailed Info, Program and Registration:  
[site.unibo.it/mml-imaging26](http://site.unibo.it/mml-imaging26)

