Topics:

STORM (Stochastic Optical Reconstruction Microscopy)
MINFLUX (MINimal fluorescence photon FLUxes microscopy)
Confocal Laser Fluorescence Microscopy
ISM (Image Scanning Microscopy)
2PEFM (Two-photon excitation fluorescence microscopy)
SHG (Second Harmonic Generation) microscopy
STED (STimulated Emission Depletion) microscopy
FLIM (Fluorescence Lifetime Imaging Microscopy)
FCS (Fluorescence correlation spectroscopy)
Label-Free microscopy
Polarization microscopy
Sample preparation
Expansion microscopy
Correlative microscopy: STED-AFM

Instruments - workstations

N1: Nikon confocal AX NSPARC resonant
Paolo Bianchini, Mattia Pesce

N2: Nikon N-STORM
Vittorio Parenti, Aiman Zahid

N3: Nikon JI-CrestV3
Giacomo Cozzi, Matteo Parri

N4: Genoa Instruments PRISM
Marco Castello, Federica Quici, Irene Nepita

N5: Nikon A1MP spectral resonant and FLIM (by ISS)
Marco Scotto D'Abbusco, Mattia Donato

N6: ISM for molecular mobility and diffusion
Eli Slenders, Andrea Bucci, Lisa Cuneo, Monika Rani

N7: Sample Preparation and Expansion Microscopy
Ivan Novotny, Michele Oneto, Hawraa Zbeeb

N8: Correlative fluorescence - atomic force microscopy
Andrea Lagomarsino, Claudio Canale

N9: Optics, label-free, Lab tour, Q&A
Alexandra Luca, Larbi Touijer, Peter Saggau

Registration visit **nic.iit.it** or **mix.iit.it**

For IIT/SIOF/SIBPA/UNIGE members:
PhD students and junior postdocs: 200 €
Postdocs: 300 €
groups (more than one person from the same research group):
170 € each person (both PhD students and postdocs)

Companies: 600 €

Non member:
PhD students and junior postdocs: 270 €
Postdocs: 370 €

The fee will include technical and scientific material, farewell buffet, and lunches.

11th NIC@IIT Nanoscopy 2.0

PRACTICAL WORKSHOP on ADVANCED MICROSCOPY

30th Nov. to 4th of Dec. 2026

nic.iit.it and **mix.iit.it**



Directors: Paolo Bianchini Alberto Diaspro

KEYNOTE SPEAKERS

Lothar Schermelleh
Department of Biochemistry, University of Oxford, Oxford, United Kingdom

Kyoohyun Kim
Max Planck Institute for the Science of Light &
Max-Planck-Zentrum für Physik und Medizin, Erlangen, Germany

Ivan Novotny
Light microscopy core facility, Institute of molecular genetics of the Czech Academy of Science, Prague, Czech Republic

Ranieri Bizzarri
Dep. Surg., Med. Molec. Path., Crit. Care Medicine, University of Pisa, Pisa, Italy

Alvaro H. Crevenna
Epigenetics and Neurobiology Unit, EMBL Rome, Monterotondo, Italy

Francesca Pennacchietti
Department of Applied Physics and Science for Life Laboratory, KTH Royal Institute of Technology, Stockholm, Sweden.

Irene Farabella
Integrative Nuclear Architecture, IIT, Genoa, Italy

Giuseppe Vicidomini
Molecular Microscopy and Spectroscopy, IIT, Genoa, Italy

Peter Saggau
Baylor College of Medicine, USA

Claudio Canale
Dep. Physics, University of Genoa, Genoa, Italy

Monday 30th

Camera di Commercio Genova

Sala delle Grida, Palazzo della Borsa
City Center - Via XX Settembre 44, Genova

Keynote Lectures

13.45 registration

14.00 *Welcome,*
Institutional greetings and Opening Remarks

14.05 Lothar Schermelleh
The power of super-resolution SIM to uncover principles of chromatin organisation

14.45 Kyoohyun Kim
Quantitative Label-Free Imaging of Cellular and Tissue Biophysics

15.25 Ivan Novotny
Sample Preparation for Light Microscopy: Principles and Practical Tips

16.05 *coffee break*

16.30 Ranieri Bizzarri
A short super-resolution microscopy course for the adventurous naturalist

17.10 Alvaro H. Crevenna
Studying tissue architecture with spatial transcriptomics

17.50 Francesca Pennacchietti
Photoswitchable fluorescent proteins for live cell nanoscopy

18.30 Paolo Bianchini and Alberto Diaspro
Round table and closing remarks

19.00 Farewell with drinks and nibbles.
An Italian-style aperitif that combines drinks with a light dinner.
Only for registered students and speakers

Tuesday 1st

iit Istituto Italiano di Tecnologia, via E. Melen 83B, **Erzelli** district, Genova, Italy

Closed sessions for registered students

Conference room at Pitagora/Fibonacci(10th floor)

9.50 Irene Farabella. Investigating 3D genome organisation at the nanoscale with Chromatin Tracing
10.30 Giuseppe Vicidomini. Super-resolution laser scanning microscopy with detector array
11.10 Peter Saggau. Acousto-optic devices in microscopy
11.50 Claudio Canale. Exploring Intermolecular Processes with Correlative AFM-STED Microscopy
12.30 Group Picture *(9th Floor)*
12.45 LUNCH (canteen, 1st floor)

Hands-on

NIC@IIT, Nanoscopy and MMS labs (9th floor)

	Group1	Group2	Group3	Group4	Group5	Group6	Group7
14.10 – 15.10	N1	N2	N3	N4	N5	N6	N7
15.10 – 16.10	N2	N3	N4	N5	N6	N7	N8
16.10 – 16.40	coffee break						
16.40 – 17.40	N3	N4	N5	N6	N7	N8	N9
17.40 – 18.40	N4	N5	N6	N7	N8	N9	N1

Wednesday 2nd

	Group1	Group2	Group3	Group4	Group5	Group6	Group7
9.30 – 10.30	N5	N6	N7	N8	N9	N1	N2
10.30 – 11.30	N6	N7	N8	N9	N1	N2	N3
11.30 – 11.50	coffee break						
11.50 – 12.50	N7	N8	N9	N1	N2	N3	N4
12.50 – 14.10	LUNCH (canteen, 1st floor)						
14.10 – 15.10	N8	N9	N1	N2	N3	N4	N5
15.10 – 16.10	N9	N1	N2	N3	N4	N5	N6
16.10 – 16.40	coffee break						
16.40 – 18.40	Open session: back to the workstation of your choice (N1–N6, N8), booking required						

Thursday 3rd

	Workshop 1 **NIS-Elements 7** Abril Escamilla	Workshop 2 **Spatial Omics for Nuclear Architecture** Irene Farabella, Chantal Usai	Workshop 3 **Expansion microscopy** Michele Oneto
9.30 – 12.20	A	B	C
12.20 – 13.30	LUNCH (canteen, 1st floor)		
13.30 – 15.50	C	A	B
15.50 – 16.20	coffee break		
16.20 – 18.40	B	C	A

Friday 4th

	IIT Erzelli (N1–N6, N8)	Dept. of Physics, University of Genoa via Dodecaneso 33, 16146 Genova
9.30 – 11.00	booked workstation	Leica Stellaris 8 / Abberior MINFLUX
11.00 – 11.20	coffee break	
11.20 – 12.50	booked workstation	Abberior MINFLUX / Leica Stellaris 8
12.50	CLOSING REMARKS and LUNCH	