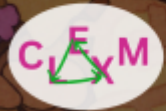


CORRELATIVE MULTIMODAL IMAGING in LIFE SCIENCES



SYMPOSIUM

Institut Pasteur -Synchrotron SOLEIL scientific meeting

Monday, June 30, 2025

CFJ Auditorium, Institut Pasteur

The event is completely free of charge but registration is mandatory via this link:

<https://indico.synchrotron-soleil.fr/event/120/>

Please register by June 15, 2025.



Organizing Committee:

Anna Sartori-Rupp, Jost Enninga, Nicolas Wolff, Anastasia Gazi, Johannes Groen (IP),
Frederic Jamme, Pierre Legrand & Pierre Montaville (Synchrotron SOLEIL)



Health & Well-Being



9:15-9:45: Welcome
(CFJ Auditorium Hall)

9:45-10:00 *Introduction of the Meeting*

- Eva PEREIRO (Synchrotron SOLEIL)
- Anna SARTORI-RUPP (Institut Pasteur)

Sample Preparation for Multimodal & Multiscale Imaging

Chairperson: Nicolas WOLFF (Institut Pasteur)

10:00-10:30 Amélie LEFORESTIER (Paris Saclay)
Optimization of cryo Electron Tomography of Vitreous Sections for Chromatin Imaging in Drosophila embryos

10:30-10:45 Harisa RISTA (Synchrotron SOLEIL)
Methods and Insights for Biological Imaging: Exploring Cryo-Correlative Light, Electron, and X-ray Microscopy (Cryo-CLEXM)

10:45-11:00 Antonio EL HELOU (Institut Pasteur)
In situ Imaging of the Usher2 complex involved in Hearing and Vision

11:00-11:20: Coffee break
(CFJ Auditorium Hall)

Multiscale Imaging I (Biological)

Chairperson: Frédéric JAMME (Synchrotron SOLEIL)

11:20-11:50 Johannes GROEN (Institut Pasteur)
Multimodal and Correlative Imaging Approaches to study Early Stages of SARS-CoV 2 infection

11:50-12:05 Madeleen BRINK (University College Dublin)
From Pixels to Pathways: Correlative Imaging of Nanoparticle Dynamics in Cells

12:05-12:20 Jakub KRSTEV (University College Dublin)
Probing of Cilia structure, function and disease mechanisms using soft X-ray microscopy

12:20-13:50: Lunch break
(Building 6, RDC bas, Module 3)

Multiscale Imaging I (Biological)

Chairperson: Jost ENNINGA (Institut Pasteur)

13:50-14:20 Timothy WAI (Institut Pasteur)
Mitochondrial proteostasis and cardiac health



Infection - Host-pathogen interactions

Chairperson: Pierre MONTAVILLE (Synchrotron SOLEIL)

- 14:20-14:50 Emmanuelle QUEMIN (Institute for Integrative Biology of the Cell)
Probing poxvirus assembly by CryoET
- 14:50-15:05 Kevin MAMPRIN (ALBA synchrotron)
Using correlative cryo-SXT and cryo-SIM imaging to study the morphology of membranous rearrangements of West Nile Virus - infected cells
- 15:05-15:20 Keith EGGER (Institut Pasteur)
Integrating cryo-correlative pipelines and structural biology to decipher the dynamics of the type III secretion system

15:20-15:40: Coffee break
(CFJ Auditorium Hall)

Multiscale Imaging II (Instruments - Technology)

Chairperson: Pierre LEGRAND (Synchrotron SOLEIL)

- 15:40-16:10 Christoph KAISER (MPI Biochemistry Munich)
FIB-based sample preparation for the quasi-native imaging of small organisms and tissues down to the molecule scale
- 16:10-16:25 Fariha MAHZABIN (Heidelberg University)
Correlating 3D Super-Resolution Fluorescence and Soft X-ray Microscopy to Probe Genome Organization in Cells
- 16:25-16:40 Michaela SALAKOVA (Aalen University)
From Confocal to FIB-SEM: A Correlative Microscopy Outlook on Nanoplastics in Cells

16:40-17:00: Coffee break
(CFJ Auditorium Hall)

3D Correlation and Data Analysis

Chairperson: Anastasia GAZI (Institut Pasteur)

- 17:00-17:30 Perrine PAUL-GILLOTEAUX (BioCore CNRS Nantes)
Facilitating 3D correlation of CLEXM and its analysis using mathematical methods
- 17:30-17:45 Vincent CHUEN (SiriusXT)
Development of Fluorescence and soft X-ray Image Correlation methods to Investigate Antimalarial Drug Mode of Action
- 17:45-17:50 Closing Remarks