

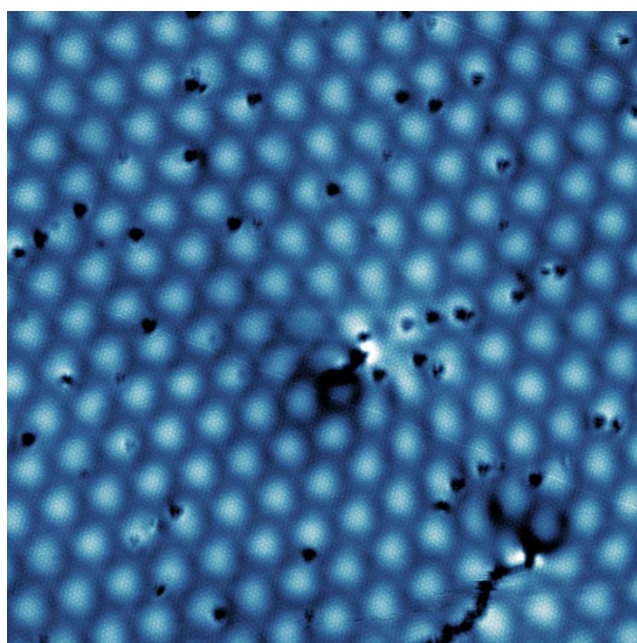


SORBONNE
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2nd International Workshop on Ultrafast Spectroscopy and 2D Materials

20th-23rd January 2025



The 2nd International Workshop on Ultrafast Spectroscopy and 2D Materials will be held in Paris, France, January 20th – January 23rd, 2025.

The event is supported by CNRS through the International Research Project MULTIMAT, the ERC DELIGHT, the ANR MISFIT and the Institut of Material Science (iMAT).



European Research Council
Established by the European Commission



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Organization committee:

Marie Hervé

Tristan Cren

Franck Vidal

François Debontridder

Robin Salvatore

Hugo Ledu

Speakers:

Matteo Calandra

Laurent Cario

Pietro Carrara

Lena Engstrom

Matias Feldman

Matteo Furci

Etienne Janod

Nicolas Jaouen

Thomas Jaouen

Hugo Ledu

David Le Bolloc'h

Patrick Le Fevre

Giovanni Marini

Marie-Aude Measson

Andrej Mesaros

Florent Pawula

Robin Salvatore

Tomas Samuelly

Pascal Simon

Marine Verseils

Sergio Vlaic

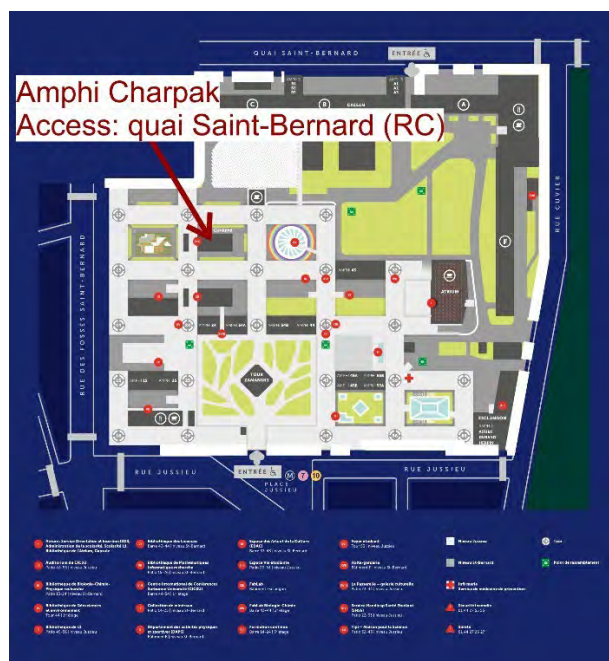
Boris Vodungbo

Ludovica Zullo

Program:

Monday 20 January 2025

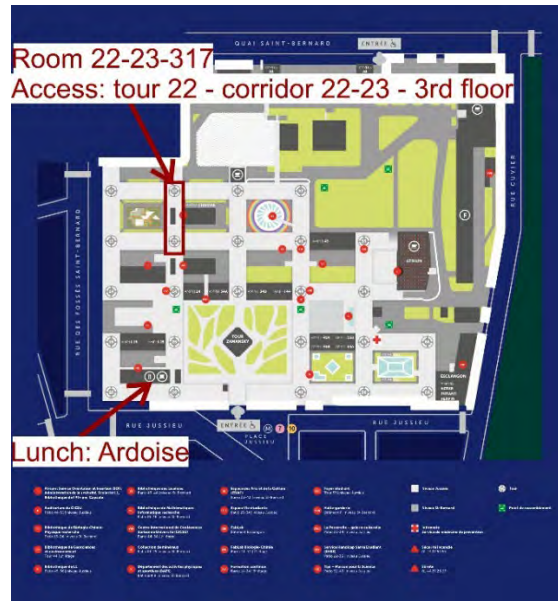
Amphi Charpak



13h00	Welcome / Coffee	
14h00	Matteo Calandra	General seminar: Theoretical Modeling of Ultrafast Phase Transitions from the Femtosecond to the Picosecond Scale
15h00	Ludovica Zullo	Misfit: A glimpse of the future in misfit layer compounds modeling
15h40	Coffee	
16h10	Florent Pawula	Misfit / Ultra-fast: Crystallochemistry and ultrafast dynamics of misfit chalcogenides
16h50	Thomas Samuely	Misfit: Title to be announced
17h30	Marie Aude Measson	Misfit: Charge-density wave collapse and lattice dynamics in Misfit

Tuesday 21 January 2025

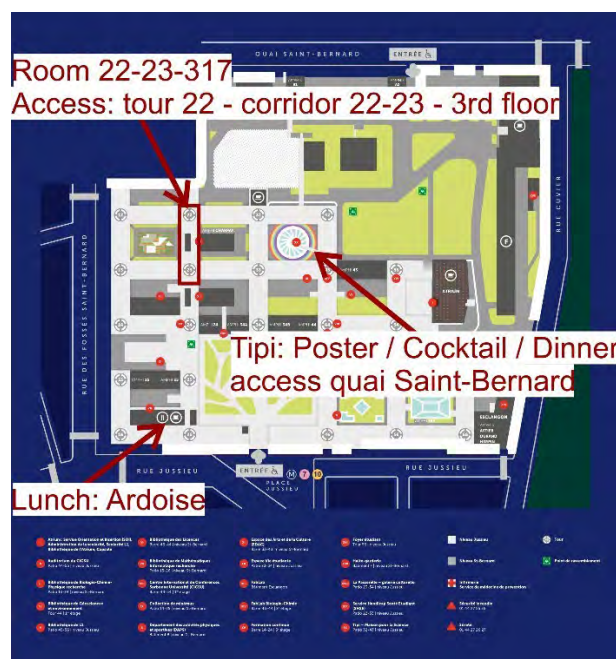
Room 22-23-317



9h30	Laurent Cario	Mottronic: Mott insulators for information storage and neuromorphic applications
10h10	Coffee	
10h40	Etienne Janod	Mottronic / Ultra-fast: Photoinduced strain waves drive ultrafast insulator-to-metal transition in V2O3
11h20	Robin Salvatore	Mottronic / 2D: Moiré and charge density waves in metallic/insulating phases of monolayer TaSe2/GaP
12h00	Lunch: Ardoise	
14h00	Boris Vodungbo	Ultra-fast: Unveiling Ultrafast Demagnetization Mechanisms with Femtosecond X-ray & XUV Sources
14h40	Nicolas Jaouen	Ultra-fast: Ultrafast time-evolution and recovery of chiral magnetic domain walls probed by soft x-ray resonant magnetic scattering
15h20	Coffee	
15h50	Thomas Jaouen	2D: Carrier-Density Control of the Quantum-Confined 1T-TiSe2 Charge Density Wave
16h30	Giovanni Marini	Ultra-fast / 2D: Dynamics, Screening, and Nonequilibrium States in layered transition metal dichalcogenides
17h10	Visit	SUMO platform or STM lab

Wednesday 22 January 2025

Room 22-23-317



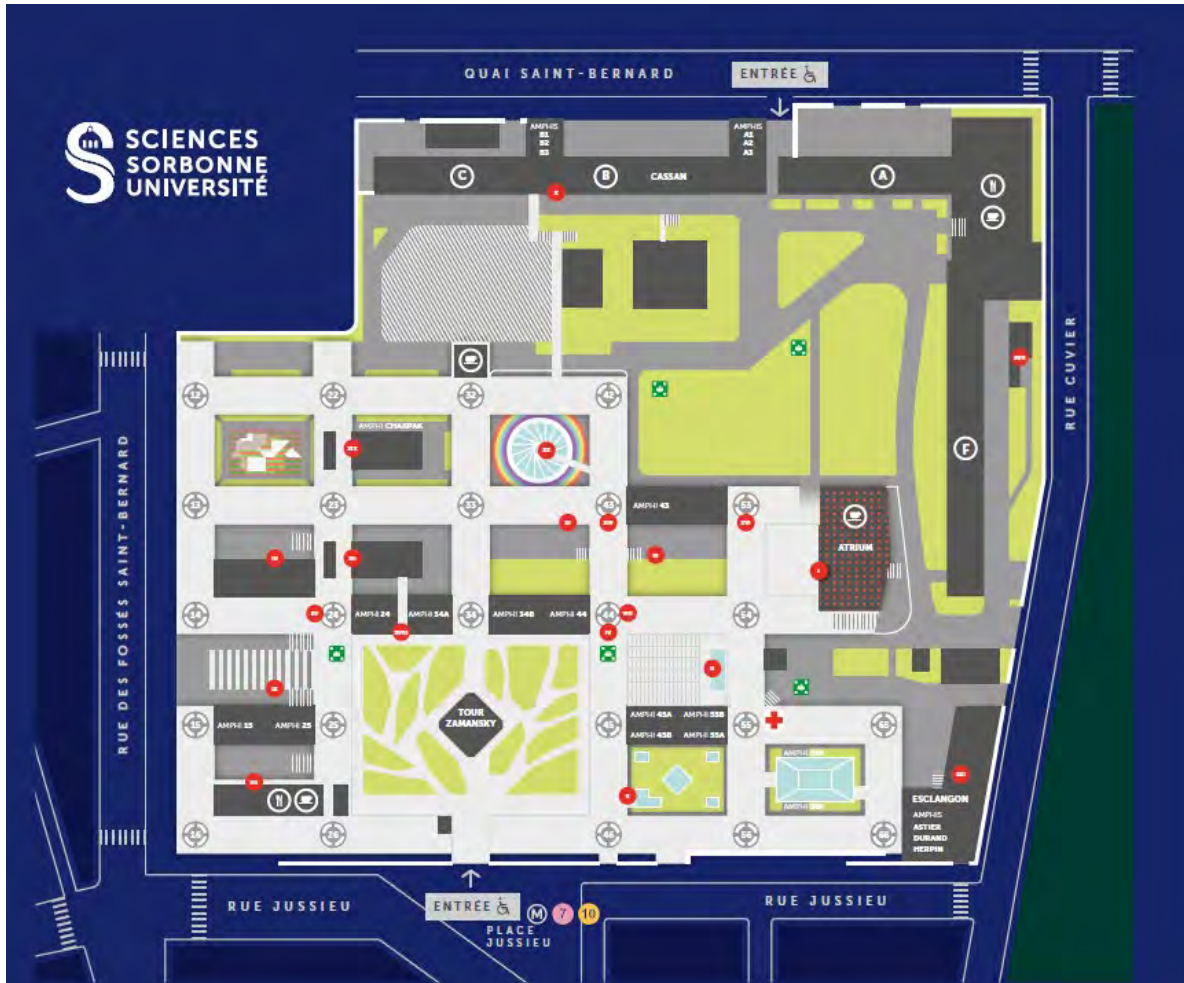
9h30	Hugo Ledu	Misfit: Tuning Charge Density Waves via band engineering in Misfit Layer compounds
10h10	Coffee	
10h40	Andrej Messaros Pascal Simon	2D: QPI focussing
11h20	Lena Engstrom	Misfit: Detecting the topological winding of superconducting nodes via Local Density of States
12h00	Lunch: Ardoise	
14h00	Pietro Carrara	Ultra-fast: Orbital Angular Momentum of light: a new tool for magnetization dynamics
14h40	Marine Verseils	Ultra-fast: Magneto-electric THz excitations under extreme conditions investigated by SR FT-IR
15h20	Coffee	
15h50	David Le Bolloc'h	Ultra-fast: Collective charge transport in the CDW observed by an XFEL source
16h30	Patrick Le Fevre	2D: Two-dimensional to bulk crossover of the WSe2 electronic band structure
17h10	Poster and co	Poster / Coktail / Dinner at Tipi

Thursday 23 January 2025

Room 22-23-317



9h30	Matteo Furci	2D: Ab-initio Simulation of Diffuse Intensity in Diffraction Experiments
10h10	Coffee	
10h40	Matias Feldman	Fast: Nanoscale control of heat flux in self-assembled ordered nanocrystal solids
11h20	Sergio Vlaic	2D: Band engineering in single atomic layers on semiconductors
12h00	Closing remark	Buffet



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| <ul style="list-style-type: none"> ➊ Admiso - Service Orientation et Insertion (SOI), Administrations de la sorbonne, Sorbonne LL, Bâtiments de Talence, Cayrolle ➋ Auditorium de CCSU Patis 44-25 Niveau Zénith ➌ Bâtiments de Biologie-Chimie-Physique recherche Patis 13-24 Niveau St-Bernard ➍ Bâtiments de Coéducation et accompagnement Tour 44 1^{er} étage ➎ Bâtiments de LI Patis 45-26 Niveau Zénith | <ul style="list-style-type: none"> ➏ Bâtiments des Ecoennes Bercs 43-44 Niveau St-Bernard ➐ Bâtiments de Mathématiques Informatiques modernes Patis 15-20 Niveau St-Bernard ➑ Centre International de Conférences Sorbonne Université (CICSI) Bercs 44-54 1^{er} étage ➒ Collection de minéraux Patis 34-25 Niveau St-Bernard ➓ Département des activités physiques et sportives (DAPS) Bâtiment B Niveau St-Bernard | <ul style="list-style-type: none"> ➔ Espace des Arts et de la Culture (EDAC) Bercs 33-43 Niveau St-Bernard ➕ Espace Vie Étudiante Patis 22-34 Niveau Zénith ➖ FabLab Bâtiment Octagone ➗ FabLab Biologie-Chimie Bercs 43-44 2^e étage ➘ Formation continue Bercs 14-24 1^{er} étage | <ul style="list-style-type: none"> ➙ Foyer Étudiant Tour 33 Niveau Zénith ➚ Halle-gardiens Bâtiment F Niveau St-Bernard ➛ La Passerelle - galerie culturelle Patis 25-34 Niveau Zénith ➜ Service Handicap Santé Étudiant (SHSE) Patis 22-33 Niveau Zénith ➝ Trip - Réseau pour la Science Patis 22-43 Niveau Zénith | <ul style="list-style-type: none"> ■ Niveau Zénith ■ Niveau St-Bernard ⚠ Information Service de médecine de prévention 🚒 Sécurité Incendie 03 44 27 53 35 📞 Secours 03 44 27 28 27 | <ul style="list-style-type: none"> Ⓣ Tour ⊕ Point de rassemblement |
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Participant list:

Christophe Brun	Institut des Nanosciences de Paris
Matteo Calandra	Trento University
Laurent Cario	Institut des Matériaux de Nantes
Pietro Carrara	Institut des Nanosciences de Paris
Justine Cordiez	Institut des Matériaux de Nantes
Tristan Cren	Institut des Nanosciences de Paris
Marie D'Angelo	Institut des Nanosciences de Paris
François Debontridder	Institut des Nanosciences de Paris
Lena Engstrom	Laboratoire de Physique des Solides
Matias Feldman	Institut des Nanosciences de Paris
Matteo Furci	Trento University
Eugenio Gambari	Institut des Nanosciences de Paris
Marie Hervé	Institut des Nanosciences de Paris
Vincent Jacques	Laboratoire de Physique des Solides
Etienne Janot	Institut des Matériaux de Nantes
Nicolas Jaouen	Synchrotron SOLEIL
Thomas Jaouen	Institut de Physique de Rennes
Claire Laulhé	Laboratoire de Physique des Solides
David Le Bolloc'h	Laboratoire de Physique des Solides
Hugo Ledu	Institut des Nanosciences de Paris
Patrick Le Fevre	Institut de Physique de Rennes
Emmanuel Lhuilier	Institut des Nanosciences de Paris
Giovanni Marini	Trento University
Florent Margaillan	Institut des Nanosciences de Paris
Marie Aude Measson	Institut Néel
Andrej Mesaros	Laboratoire de Physique des Solides
Arindam Mukherjee	Institut des Nanosciences de Paris
Yves Noat	Institut des Nanosciences de Paris
Florent Pawula	Institut des Matériaux de Nantes
Debora Pierucci	Institut des Nanosciences de Paris
Robin Salvatore	Institut des Nanosciences de Paris
Tomas Samuely	Pavol Jozef Šafárik University
Pascal Simon	Laboratoire de Physique des Solides
James Utterback	Institut des Nanosciences de Paris
Franck Vidal	Institut des Nanosciences de Paris
Sergio Vlaic	Laboratoire de Physique et d'Etude des matériaux
Marine Verseils	Synchrotron SOLEIL
Boris Vodungbo	Laboratoire de Chimie Physique-Matière et Rayonnement
Gao Yingzheng	Institut Néel
Ludovica Zullo	University of Wuerzburg