

# PhDs' Day (Journée des Doctorants) 2025

Thursday, May 22<sup>nd</sup>

Amphi Ampère, Lippmann Building

9h00

Welcome Words – Opening remarks from the director

9h10-10h20 Session 1 – Talks from 1st-Year PhDs (5+1 min)

- 1. Simon Milcent: Multiple Scattering Theory Through Stained Glass
- 2. Arthur Allen: 2D van der WAALs layeRs for sub picosecond UltraSonics
- 3. Rachel Piednoir: Triboelectricity at the solid-liquid interface
- **4. Stepan Tiaglo:** High-pressure investigation of wavelength-tuneable nanowire-based quantum light sources in telecom bands
- **5. Yuqian Zou:** (Bio-) Molecular Compounds Detection and Analysis with Innovative Nonlinear Optical Methods
- 6. Lucas Perez: Measure of an XUV temporal profile by emission perturbation
- 7. Megha Mini Regunathan: High-Pressure Effects on Battery Materials
- 8. Nathan Berrit: Opto-mechanical properties of individual plasmonic nanoparticles
- **9.** Alexis Raulin-Foissac: Collective Dynamics in Crowded Environments of Decision-Making Entities, Particularly in Very Dense Pedestrian Crowds
  - Interactive guiz on the presentations

#### 10h20-11h20 Posters & Coffee Break

◇ Posters from 2nd-year PhDs

Maria Bandurist: Surface chemistry of CdSe nanoplatelets for weighing biological nano-objects

Kevin Bilai Biloa: Optimal navigation of Brownian particles in disordered environments

Chloé BRAUX: Probing Creep and Subcritical Rupturein Heteregenous Materials

Peng CHEN: Growth and characterization of Ce3+ doped Al2O3-YAG binary and Al2O3-YAG-ZrO2 ternary

eutectics ceramics

Juliette Codevelle: Multiparametric analysis of growth, cell state and structure in colorectal tumor

spheroids with an agarose microwells platform

**Lilou Duplantier:** Photodissociation Charge Detection Mass Spectrometry (CDMS)

Kilian Duplat: Criticality and predictability of scale invariant avalanches Jesus Fernandez: Contactless ageing of dense colloidal suspensions

Mohammad Imran Shaik: Home Built VIPA Based Brillouin Spectrometer for Probing Acoustic Modes in

Self Assembled Nanoparticles

**Thi Thu Dung LIEN:** Colloidal 2D hetero-nanostructures to study delocalized excitons with charge transfer character

**Frederik MENN:** Probing the Conformational stability of Proteins from solution to the gas phase combining Lasers, Mass Spectrometry and Ion Mobility

Joseph Moreau: Embedded magnetic nano-clusters for thermoelectricity

Nicolas Pruneau: Large sapphire crystals grown by the Kyropoulos technique — Optical scans to improve

crystal quality

**Damien Rinnert:** Excited-state absorption assisted by photonic crystals for upconversion and photon-

avalanching

Eliot Saurety: Structural evolution in a 2D granular fault

Margherita Vittuci: Ultrafast heat exchange at solid liquid interfaces

Iryna Yakushiko: Reversible mechanochemistry: polarimetry study of polymers containing chiral

molecules



# 11h20-12h30 Session 2 – Talks from 1st-Year PhDs (5+1 min)

- **1. Maxime Stapelle:** A quick look at pedestrian trajectories...and a first glance at other active modes
- 2. Zebin Wang: Growth and Characterization of Rare Earth Doped YAG Crystals with Different Colors
- 3. Loan Tricaud: Ultrasonic waveguiding with plant-based phononic material
- 4. Nathanael Braos d'Urso: Migration of particles in Ice
- 5. Etienne Huguet: Plaster foam solidification
- **6.** Yann Grappe: Growth simulation of the metal / elastomer interphase used in tires.
- **7. Jialin Hu:** *Disordered Plasmonic Metasurfaces for Highly-Contrasted* Goniochromatic Effects: *Modelling and Optical Characterization*
- 8. Lou-Ann Goutier: Optoacoustic characterization of the mechanical properties of developing roots
- 9. Benjamin Buhl: Fluctuations and elasticity in polar active solids
  - Interactive quiz on the presentations

# 12h30-14h00 Lunch Break & Team-Building Activities

◇ Picnic in front of the Lippmann Building

#### 14h00-15h00 **Session 3** – Talks from 1<sup>st</sup>-Year PhDs (5+1 min)

- **1. Rocco Suanno:** *Oscillatory driving of spinodal decomposition*
- **2. Quentin Gotti:** Study and understanding of the freezing behavior of double emulsions Study of thermal and osmotic effects.
- 3. Samy Guellour: Project AISLE
- **4. Arathy Dileep:** Rare earth-doped microstructures for Integrated Optics made by Pulsed Laser Deposition: On-chip mid-infrared convertor
- 5. Janyce Beaurain: Upconversion photocatalyst for H2 production by water splitting
- 6. Boutheina Reghis: DROPDEAD: Mechanobiology of phagocytosis
- **7. Max Marrot:** Phonon drag effect at the interfaces
- **8.** Maël Laupretre: Sources laser Tamm excitées électriquement : lasers et tableaux de lasers adressables
- **9.** Romain Jandot: Growth of large Ti:sapphire crystal for the development of amplifiers at high power, in chirped pulse amplification (CPA) systems and characterizations
- Interactive quiz on the presentations

#### 16h00-17h00 Round Table: "After the PhD"

◇ Industry or public research? What are my other choices and opportunities?
With Francis Pagaud (Postdoc), Dylan Bissuel (IE at ILM), Audrey Sudreau (Air Liquide) Camille Perret,
(Scientific Mediation UCBL), Olga Chashchina, (CSO start-up)

## 16h00- 17h00 Workshops:

- ♦ How to Sell Yourself! The hidden strengths of a PhD student: how to identify and leverage them? With Arsène Chemin (MCF ILM) & Claire Dessalles (CR ILM)

## 17h00 Awards Ceremony

🙎 Best Quiz Score | Best Poster | Best Talk

## 17h30 PhDs' Day Cocktail

Salle de convivialité