

Académie d'Excellence #2 Systèmes Complexes

COMPLEX DAYS 2026

February 12 & 13, 2026

Sheraton Nice Airport



COMPLEX DAYS PROGRAM

Thursday February 12, 2026 - AM

8:30 - 9:30

Registration and welcome breakfast

9:30 - 9:35

Introduction to Complex Days

9:35 - 9:50

Presentation of IdEx governance

9:50 - 10:40

Keynote speaker

Michel DOJAT – Senior Researcher at INSERM - Deputy scientific director of INRIA for digital biology and digital medicine. Co-funder of Pixyl (pixyl.ai): Some key elements for exploring the complexity of brain.

10:40 - 11:00

Coffee break

11:00 - 11:15

Presentation of “Cellule Europe Mutualisée” - IdEx

11:15 - 11:45

Flash presentations - 5 min

- **Riccardo Sommariva** – PhD – GREDEG: *Heterogeneous Expectations with Multiple Risky Assets*;
- **Paloma Vildoso Pinto** – PhD – INPHYNI: *New Frontiers in Integrated Photonic Lattices: From Topological Physics to High-Performance Functional Devices*;
- **Lucas Sarrazin** – PhD – INPHYNI: *Observation of the spontaneous symmetry-breaking of tilted waves in a mode-locked VECSEL*;
- **Klint Ongari** – PhD – INPHYNI: *Studies on the circular hydraulic jump*;
- **Hazel Olsen** – PhD – INPHYNI: *Interaction induced Anderson transition in a kicked one dimensional Bose gas*;
- **Ivan Gerasimov** – PhD – LAGRANGE: *Cloud dissipation timescales in the nearby galaxy M33*.

11:45 - 12:15

Oral presentations – 15 min

- **Ella Tanchon** – PhD – LAGRANGE: *Uncovering the multi-scale nature of the interstellar structures of nearby galaxies with JWST*;
- **Simone Scollo** – Post-Doc – LAGRANGE: *Kelvin waves in superfluid helium*.

COMPLEX DAYS PROGRAM

Thursday February 12, 2026 - PM

12:15 - 15:00

Lunch and Poster session N°1

15:00 - 16:00

Oral presentations – 15 min

- **Guillaume Costa** – Post-Doc – LAGRANGE: *Self-similar solutions in two-dimensional Gross-Pitaevskii equation*;
- **Arkadeep Datta** – Post-Doc – INPHYNI: *Tears of condensation: Droplet growth and detachment dynamics on cylindrical surfaces*;
- **Vincent Bertin** – CNRS Researcher – INPHINI: *The physics of pencil drawing*;
- **Louis Jourdan** – PhD – LJAD: *A variational quantum algorithm for the 2D-Block pair Unitary Coupled Cluster (2D-BpUCC) method*.

16:00 - 16:30

Coffee break

16:30 - 17:15

Oral presentations – 15 min

- **Michel Mitov** – CNRS Researcher – INPHYNI: *Pushing the limits of optical tagging functionalities with cholesteric liquid crystals*;
- **Varvara Iachkula** – PhD – INPHYNI: *Coherence properties of Kerr frequency combs under noisy injection and optical feedback*;
- **Nadir Lahfaïdh** – Post-Doc – ICN: *Kinetic insight into the chemical recycling of biobased thermosetting plastics and composites*.

COMPLEX DAYS PROGRAM

Friday February 13, 2026 - AM

8:30 - 9:30

Registration and welcome breakfast

9:30 - 10:00

Flash presentations – 5 min

- **Clément Lemineur – PhD – LAMHESS:** *Increased energetic cost of running with aging is associated to a redistribution of joint mechanical work and lower Achilles strain tendon energy;*
- **Hongru Tian – PhD – INPHYNI:** *Bioinspired water harvesting for a sustainable development;*
- **Yara Zgheib – PhD – I3S:** *Sparsity-based regularization for learning over multitask graphs;*
- **Gustavo Faia Fagundes – PhD – I3S:** *A hypergraph-based Lasso regularization for distributed learning;*
- **Claire Barbier – PhD – LJAD:** *From Signal Dynamics to Cell Fate: The Role of Learning Duration;*
- **Nawel Belkessa – PhD – ICN:** *Molecular approach of uranium and neptunium accumulation in bivalve Mytilus Galloprovincialis.*

10:00 - 10:30

Oral presentations – 15 min

- **Maud Saulay Carrey – PhD – LAMHESS:** *Neurocognitive complexity of translating information from visuospatial map to action;*
- **Rodrigo Cofre – Researcher – INRIA:** *Modeling different States of Consciousness: Biophysical Whole-Brain Simulations of Sleep, General Anesthesia and Psychedelics.*

10:30 - 11:00

Coffee break

11:00 - 12:00

Oral presentations – 15 min

- **Mauro Napoletano – Professor – GREDEG:** *On the Environmental Impact of Global Interconnected Productive Activities;*
- **Christophe Henry – Researcher – INRIA:** *Population dynamics Modeling Thematic semester;*
- **Jérémie Topin – Associate Professor – ICN:** *Spectroscopic Investigation of Protein–Odorant Complexes - Toward the Development of a Bioelectronic Nose;*
- **David Hernandez – Post-Doc – LJAD:** *A Biophysical Model of Protease-Independent Basement Membrane Invasion.*

COMPLEX DAYS PROGRAM

Friday February 13, 2026 - PM

12:00 – 15:00

Lunch and Poster session N°2

14:30 – 15:00
Jury's deliberation

15:00 – 16:00

Oral presentations – 15 min

- **Matteo Rauzi – Researcher – IBV:** *The dynamics of the living: from the molecule to the organism and back.*
- **Nathan Jourdainne – PhD – ICN:** *Eco-Design of Biopolyesters: Structure–Properties Relationships Driving Recycling and Circularity;*
- **Antoine Jallon – PhD – IBV/LiPhy:** *From Buckling to Internalisation: Tissue Folding Modelled with Morphoelastic Shells;*
- **Barthelemy Delorme – Research Engineer – IBV:** *Mechanisms and mechanics of tubulogenesis in the embryo of the sea urchin Paracentrotus lividus.*

16:00 – 16:15

Poster prizes ceremony and event closure

16:15

Final coffee