



## COMPLEX DAYS

February 5 and 6, 2024

Crowne Plaza - Nice



# COMPLEX DAYS PROGRAM

## Monday February 5, 2024

13:00 – 13:20

Registration

13:20 – 13:30

Jérémie Bec – Foreword on the Academy “Complex Systems”

13:30 – 15:15

### ORAL PRESENTATIONS I

13:30 – **Fabrizio Li Vigni**  
(Centre Internet et Société - CNRS)

*History and sociology of complexity sciences*

15:15 -15:30

Short Break

15:30 -16:45

### ORAL PRESENTATIONS II

15:30 – **Jérôme Emonet** (Inria)  
*A retino-cortical computational model to study suppressive cortical waves in saccades*

15:45 – **Hladis Matej** (ICN)  
*Representation learning and graph neural networks for Polypharmacology: application to combinatorial code of olfaction*

16:00 – **Carelle Keyrouz** (INPHYNI)  
*Fluids of light in disordered environment*

16:45 -17:15

Coffee Break

17:15 -18:15

### ORAL PRESENTATIONS III

17:15 – **Eleni Effraimopoulou** (PERSEE)  
*From hydrophilic to hydrophobic: Pectin aerogels for thermal insulation applications*

17:30 – **Louis Hausseux** (Inria)  
*A new density estimator based on percolation phenomenon and simplicial complexes*

18:30 -20:00

### Aperitifs and posters session

14:30 – Poster Teasers

Antonin Bavoil (Inria), Hiba Bouras (Cemef), Léa Cailly-Brandstätter (Cemef), Felix Gudin (INPHYNI), Florea Ileana (CRHEA), Maxime Renault (Cemef), Alexandre Vigna-Brummer (INPHYNI), Jérémie Topin (ICN), François-Xavier Gauci (INPHYNI), Lucas Zanaglia (INPHYNI), Sarah-Amira Ouertani (iBV)

16:15 – **Tian Peng** (LJAD)

*Statistics of local level spacings in quantum chaos*

16:30 – **Yu Sujie** (Cemef)

*Drug release kinetics of L-Ascorbic acid 2-phosphate sesquimagnesium salt hydrate from porous carboxymethyl cellulose: comparison of aerogels and cryogels*

17:45 – **Maxence Lalis** (ICN)

*From molecular binding to conformational change, an extensive study on Olfactory Binding Protein (OBPs)*

18:00 – **Riccardo Sommariva** (GREDEG)

*Heterogeneous Expectations with Multiple Risky Assets*

# COMPLEX DAYS PROGRAM

## Tuesday February 6, 2024

08:30 – 09:00

Registration and Coffee

09:00 – 10:15

### ORAL PRESENTATIONS IV

09:00 – **Touba Lo Serigne** (INPHYNI)  
*Influence of adhesion in the shear thinning of concentrated non-Brownian suspensions*

09:15 – **Siddhartha Mukherjee** (LJAD)  
*Is a uniaxial approximation for polymeric fluids suitable for elastic turbulence?*

09:30 – **Lais Possari** (Cemef)  
*Residual orange biomass derived porous materials*

10:15 – 10:45

Selection of the best presentations by students

10:45 – 12:00

### ORAL PRESENTATIONS V

10:45 – **Mauro Napoletano** (GREDEG)  
*Mission-oriented policies and the “Entrepreneurial State” at work: An agent-based exploration*

11:00 – **Christian Miniatura** (INPHYNI)  
*Prethermalization and wave condensation in a nonlinear disordered Floquet system*

11:15 – **Dmitry Ponomarev** (Inria)  
*Inverse problem in paleomagnetism: Making the most of the measured data*

12:15 -14:30

Aperitif & Lunch

09:45 – **Gonzague Radureau** (Lagrange)  
*A new high-performance computation method of the Eddington tensor in radiation hydrodynamics simulation*

10:00 – **Francesco Toni** (GREDEG)  
*Pseudo Rational ABM Expectations*

11:30 – **Christophe Brouzet** (INPHYNI)  
*Pole vaulting of long fibres in a turbulent wall-bounded flow*

11:45 – **Guy Libourel** (Lagrange)  
*OSIRIS-REx asteroid sample return mission*