

# Spatio-temporal encoding and decoding in cell signaling

March, 20<sup>th</sup> 2020, Paris (Biopark)

## Preliminary program

**9:30-10:00 am Registration, welcome**

**10:00-11:20 am Calcium signaling**

**10h-10h40 Hugues Berry**

Inria Grenoble Rhône-Alpes, équipe-projet Beagle

*Spatio-temporal dynamics of calcium signaling in tiny subcellular domains:  
the case of astrocyte processes*

**10:40-11:20 am Ursula Kummer**

COS Heidelberg, Modeling of Biological Processes

*Amplitude versus frequency coding in calcium oscillations*

**11:20 am-12:40 pm GPCR signaling**

**11:20 am-12:00 pm Eric Reiter**

UMR Physiologie de la Reproduction et des Comportements, équipe BIOS (Biologie et bioinformatique des systèmes de signalisation)

*Role of kinetics and trafficking in GPCR-mediated signaling*

**12:00-12:40 pm Margaritis Voliotis**

University of Exeter, Centre for Predictive Modeling in Healthcare

*Information transfer in gonadotropin-releasing hormone (GnRH) signaling*

**12:40-2:00 pm Lunch pause**

**2:00-3:20 pm Signaling and decision making**

**2:00-2:40 pm Olivier Pertz**

University of Bern, Institute of Cell Biology

*Decoding and Re-encoding MAPK Fate Decision Signaling*

**2:40-3:20 pm Madalena Chaves**

Inria Sophia Antipolis - Méditerranée, équipe-projet Biocore

*A positive feedback loop in apoptosis to explain heterogeneity in cell response to cancer drugs*

**3:20-4:00 pm Onset and propagation of oscillations in signaling**

**3:20-4:00 pm Jacques-Alexandre Sepulchre**

Institut de Physique de Nice

*Modeling the onset of periodic and excitable dynamics in signaling motifs*

**4:00-4:40 Joseph d'Alessandro**

Institut Jacques Monod, équipe Adhésion cellulaire et mécanique

*Autonomous oscillations of confined epithelia: a dance-based rangefinder*

**4:45 Workshop ends**