

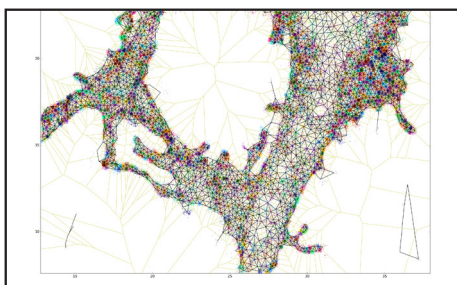
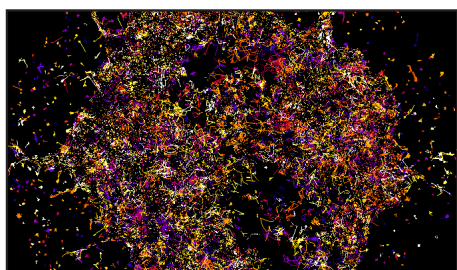
Inserm Workshop 250

Intracellular dynamics of molecules: analysis and models

REGISTRATION DEADLINE: April 19, 2019

ORGANIZERS: Hugues BERRY (INRIA, Villeurbanne), Cyril FAVARD (IRIM, Montpellier), Jean-Baptiste MASSON (Institut Pasteur, Paris)

AIMS: This Workshop will cover the main experimental methods to quantify the mobility and trajectories of biomolecules in living cells, with an emphasis on the quantification methods for individual trajectories and the interest of computer simulations for analysis and interpretation.



PHASE I – CRITICAL ASSESSMENT

June 24-26, 2019 - Bordeaux

AN INTRODUCTION TO THE MICROSCOPY METHODS FOR INTRACELLULAR MOVEMENTS OF MOLECULES

Maiïté COPPEY-MOISAN (Institut Jacques Monod, FRA), Cyril FAVARD (IRIM, FRA), Cécile FRADIN (McMaster University, CAN), Rory R. DUNCAN (Heriot-Watt University, GBR), Jean-Baptiste SIBARITA (IINS, FRA)

RECENT METHODS FOR TRAJECTORY ANALYSIS IN LIVING CELLS

Hugues BERRY (INRIA, FRA), Christian VESTERGAARD (Institut Pasteur, FRA), Mark BATHE (MIT, USA), Christophe ZIMMER (Institut Pasteur, FRA), Hervé MARIE-NELLY (Institut Pasteur, FRA), Jean-Baptiste MASSON (Institut Pasteur, FRA)

ILLUSTRATION ON SPECIFIC CASES

Kim Avrama BLACKWELL (George Mason University, USA), Timothée LIONNET (NYU School of Medicine, USA), Diego KRAPP (Colorado State University, USA)



PHASE II – TECHNICAL WORKSHOP

July 1-4, 2019 - Lyon

The practical phase will provide an in-depth view of the quantification tools for the experimental methods presented during Phase I (FCS, x-ICS, sptPALM) with a focus on the statistical analysis of single-particle trajectories and related modeling and computer simulation approaches. Using «hands-on» sessions on laptop computers, it will foster a dialog between analysis methods and computer simulations. Hence, in addition to real experimental data, the participants will be led to assess the range of validity of each analysis methods by applying them on computer-simulated data that they will generate themselves.

SELECTION: 10 to 20 trainees will be selected among Phase I participants.

Information and registration:
ateliers@inserm.fr