

3rd Q-BIO SYMPOSIUM

VENDREDI 25 MAI 2018 – 10H00

INSTITUT PASTEUR, PARIS

Physical Aspects in Membrane Biology

SESSION 1 – SINGLE MOLECULE APPROACHES AND DYNAMICS

09:00-10:00 Welcome & Registration

10:00-12:00

Probing biological Membrane with random walks

Elucidating the nanoscale architecture of the plasma membrane with super-resolution spectroscopy

Cryo-electron microscopy: a relevant tool to investigate membrane reshaping

Imaging subcellular dynamics from cells to multicellular organisms

Jean-Baptiste Masson, Institut Pasteur

Erdinc Schezgin, Institut Curie

Aurélié Bertin, Institut Curie

Tomas Kirchhausen, Harvard Medical School

12:00-14:00 Lunch Break (Buffet open to all)

SESSION 2 – MEMBRANE FUSION AND FISSION

14:00-15:30

Membrane fusion proteins and their target membrane insertion mechanisms

Role of the heptad repeat domains of Mitofusin in mitochondrial fusion

Friction-driven scission of membrane tubes

Felix Rey, Institut Pasteur & CNRS

David Tareste, Institut Jacques Monod

Andrew Callan-Jones, Université Paris-Diderot

15:30-16:00 Coffee Break

SESSION 3 – PLASMA MEMBRANE AND ORGANELLE RELATED PROCESSES

16:00-17:30

Modelling membrane-bound cellular organelles with non-equilibrium dynamics

The Golgi apparatus, a mechanosensitive organelle ?

Translating carbohydrate information into function for the clathrin-independent construction of endocytic pits

Dynamic and geometrical control of a membrane contact site by an intrinsically unstructured region

Pierre Sens, Institut Curie

Jean-Baptiste Manneville, Institut Curie

Ludger Johannes, Institut Curie

Bruno Anthony, Université de Nice