

December 17th, 2020 **Physics-Biology Interface**

Web conference

- ▶ 9:00am – 9:30am **Welcome**
- ▶ 9:30am – 10:10am Laser-Polarized xenon for biological applications: toward in vivo imaging - **Céline BOUTIN**, Iramis
- ▶ 10:10am – 10:50am Super-resolution microscopy to resolve the intimate organization of the synapse - **Eric HOSY**, Institut Interdisciplinaire de Neurosciences, Bordeaux
- ▶ 10:50am – 11:10am **Break**
- ▶ 11:10am – 11:50am Multiscale and multiphase organization of the transcriptome: insights from imaging and purification of endogenous RNA condensates - **Arnaud HUBSTENBERGER**, Institut de Biologie Valrose, Nice
- ▶ 11:50am – 12:30pm Complex dynamics and dynamic complexes: The essential role of intrinsic protein disorder studied by NMR spectroscopy - **Martin BLACKLEDGE**, Institut de Biologie Structurale, Grenoble
- ▶ 12:30pm – 12:45pm Elastically limited intracellular phase separation - **Pierre RONCERAY**, Princeton University, Princeton
- ▶ 12:45pm – 1:00pm Probing the role of RNA on the morphology of phase separated condensates - **Audrey COCHARD**, Ecole Normale Supérieure de Paris, Paris
- ▶ 1:00pm – 1:15pm Phasing-in protein quality control in the nucleus - **Frédéric FROTTIN**, Institute for integrative biology of the cell (I2BC), Gif-sur-Yvette
- ▶ 1:15pm – 2:00pm **Lunch time**
- ▶ 2:00pm – 2:40pm Shaping lipid membranes with proteins and actin polymers: deciphering mechanisms with reconstituted systems - **Patricia BASSEREAU**, Institut Curie, Paris
- ▶ 2:40pm – 3:20pm Elasticity from entanglements in branched actin - **Martin LENZ**, Laboratoire de Physique Théorique et Modèles Statistiques, Orsay
- ▶ 3:20pm – 3:35pm Understanding mechanotransduction through the in vitro reconstitution of actomyosin-dependent protein machineries - **Christophe LE CLAINCHE**, Institute for integrative biology of the cell (I2BC), Gif-sur-Yvette

- ▶ 3:35pm – 3:50pm Carotenoids crystalloids in chromoplast exhibit singlet fission - **Manuel LLANSOLA-PORTOLES**, Institute for integrative biology of the cell (I2BC), Gif-sur-Yvette
- ▶ 3:50pm – 4:05pm Experimental and Mathematical modeling of radial water transport in plants - **Yann BOURSIAC**, INRAE, Montpellier
- ▶ 4:05pm – 4:20pm **Break**
- ▶ 4:20pm – 5:00pm Spatial organization, dynamics and behaviour of single cells in complex communities - **Marcello NOLLMANN**, Centre de Biochimie Structurale, Montpellier
- ▶ 5:00pm – 5:40pm Real time control of gene expression and biological circuits - **Pascal HERSEN**, Institut Curie, Paris
- ▶ 5:40pm – 5:50pm Conclusions
- ▶ 5:50pm **Closure**

REGISTRATION : <https://physicsbiology.sciencesconf.org>