



# Journées plénières du GDR CellTiss

**3-5 novembre 2014**

**Mont Sainte Odile,  
Alsace, France.**

## Monday November 3, 2014

- 11:30 *Check-In and Registration*
- 12:00-13:30 *Welcome lunch*
- 13:30-14:05 Felix Naef (EPFL Lausanne)  
*Synchronization and resonances of cellular oscillators*
- 14:05-14:40 Daniel Riveline (Cell Physics Lab., ISIS/IGBMC, Strasbourg)  
*Active gels in vivo*
- 14:40-15:15 Mauricio Baptista (Chemistry Institute, Sao Paolo)  
*Photosensitization reactions in health sciences*
- 15:15-15:50 Maxime Dahan (Institut Curie, Paris)  
*Target search of DNA-binding proteins in a mammalian nucleus:  
How to find a specific site in the genome?*
- 15:50-16:20 ----- *Coffee break* -----
- 16:20-17:40 (4 talks, 20' each) Arumugam S. (Institut Curie, Paris) :  
*Fluctuation-Driven Clustering of Nanoparticles on Lipid Membranes*
- Campillo C. (LAMBE, Evry) :  
*The role of cortical mechanics on the asymmetric division of mouse ovocyte*
- Planade J. (ESPCI, Paris) :  
*Insight on the mechanical role of protein partners in yeast actin networks*
- Gonzalez Rodriguez D. (LadHyX, Palaiseau) :  
*Microindenteur Cellulaire pour Caractériser la Mécanique de la Rupture Membranaire*
- 17:40-17:50 Presentation of the team *Physique et nano-micro bio-ingénierie pour le vivant*, at CINM, Marseille.
- 17:50-19:30 "Poster minute" + Posters
- 19:30 ----- *Dinner* -----



## Tuesday November 4, 2014

- 8:45-09:45 Frédéric Pincet (LPS, Paris)  
*Intracellular trafficking: compartmentalization, specificity and exchanges between the various organelles*
- 09:45-10:30 Thomas Neu (Department River Ecology, Magdeburg)  
*The matrix of interfacial microbial communities*
- 10:30-11:05 François Nedelec (EMBL, Heidelberg)  
*The Steady-state Organization of a Meiotic Spindle*
- 11:05-11:30 ----- Coffee break -----
- 11:30-12:50  
(4 talks, 20' each) Fourcade B. (ENS, Lyon) :  
*Theory of cell signalisation at adhesive sites : Integrin activation, integrin clustering and integrin organization into rosettes are the hallmarks of positive feedback loops generated by local phosphoinositide production*
- Bitbol A.F. (LSI IG, Princeton) :  
*Fundamental constraints on the abundances of chemotaxis proteins*
- Grammont M. (PhLAM, Lille) :  
*Epithelial morphogenesis in Drosophila: the genetics & the mechanics*
- Sorre B. (MSC, Paris) :  
*Model systems to study embryonic patterning*
- 12:50-14:00 ----- Lunch -----
- 14:00-15:00 Michel Labouesse (IGBMC, Strasbourg) :  
*Embryonic life under tension*
- 15:00-16:20  
(4 talks, 20' each) Nahaboo W. (ENS, Lyon) :  
*Microtubule dynamics and mechanical forces in the one-cell C. elegans embryo*
- Doonaruma D. (LCVN, Montpellier) :  
*Micro- and macro-rheology of bronchial mucus*
- Riaz M. (Faculty of Science, Mons) :  
*Deciphering the mechanisms of durotaxis in crawling cells*
- Dillard P. (Aix-Marseille Univ., Marseille) :  
*Biophysical Studies of T-cell adhesion*
- 16:20-18:00 ----- Coffee break + Posters -----
- 18:00-18:45 Luca Monticelli (IBCP, Lyon)  
*Molecular simulations of lipid membranes*
- 19:30 ----- Dinner -----



## Wednesday November 5, 2014

- 09:00-09:35 Karen Perronet (Institut d'Optique, Paris)  
*Kinetics of mammalian translation by single molecule fluorescence microscopy*
- 09:35-10:10 Erwin Peterman (University of Amsterdam)  
*A single-molecule view of intracellular transport in living *C. elegans**
- 10:10-10:40 ----- *Coffee break* -----
- 10:40-11:20 (2 talks, 20' each) Attwell S. (Institut Curie, Paris) :  
*Force et couple dans les pinces magnétiques: Paysage énergétique de la protéine hRad51 sur ADN double-brin*
- Wang Y.J. (LPS, Paris) :  
*Combining SFA and FRET to monitor the progressive zippering of two biomolecules during force measurements*
- 11:20-12:15 Round Table : the next GDR.
- 12:15-13:50 ----- *Lunch* -----
- 13:50-14:25 Loïc Legoff (IBDM, Marseille) :  
*How mechanics shape growing tissues*
- 14:25-15:00 Anne Cécile Reymann (MPI, Dresden)  
*Actin filament alignment by flow*
- 15:00-15:40 (2 talks, 20' each) Charvin G. (IGBMC, Strasbourg) :  
*Single cell analysis of entry into replicative senescence in budding yeast*
- Boselli F. (IGBMC, Strasbourg) :  
*Hemodynamic frequency content regulates valvulogenesis*
- 15:50 ----- *End of the meeting* -----

