



## Workshop « Modeling in Cell and Developmental Biology »

1<sup>st</sup> December 2015 - Paris, France

### Program

- 8:30 - 9:20 AM Arrival of the Participants & Poster Hang-up
- 9:20 - 9:30 AM Welcome Address
- Session I: Biophysical modeling of intracellular processes**  
**Chair: Laurent Héliot**
- ▶ 9:30 - 10:10 AM Integrated models of cytoskeleton-driven morphogenetic processes  
François Nedelec, EMBL Heidelberg, Germany
  - ▶ 10:10 - 10:50 AM From active gel models of cell mechanics to cell trajectories  
Raphaël Voituriez, Université Pierre et Marie Curie, Paris, France
  - ▶ 10:50 - 11:10 AM Coffee Break
- Session II: Cell dynamics and tissue differentiation**  
**Chair: Frédérique Clément**
- ▶ 11:10 - 11:50 AM Multistability in cell fate specification during development  
Geneviève Dupont, Université Libre de Bruxelles, Belgium
  - ▶ 11:50 - 12:30 AM Multiscale modeling of ovarian follicular development  
Danielle Monniaux, INRA Tours, France
  - ▶ 12:30 AM - 2:45 PM Buffet lunch and poster session
- Session III: Modeling plant morphogenesis**  
**Chair: Sylvie Schneider-Maunoury**
- ▶ 2:45 - 3:25 PM Swarms and Traffic-jams in Development  
Veronica Grieneisen, John Innes Centre, Norwich, UK
  - ▶ 3:25 - 4:05 PM Unraveling the biophysical mechanisms behind plant morphogenesis  
Arezki Boudaoud, ENS Lyon, France
  - ▶ 4:05 - 4:25 PM Coffee Break
- Session IV: Modeling animal morphogenesis and morphological evolution**  
**Chair: Nadine Peyriéras**
- ▶ 4:25 - 5:05 PM Building a body: Towards a multi-scale image-driven dynamical model of limb development  
James Sharpe, CRG, Barcelona, Spain
  - ▶ 5:05 - 5:45 PM Models of embryonic development and morphological evolution  
Isaac Salazar-Ciudad, University of Helsinki, Finland
  - ▶ 5:45 - 6:00 PM Concluding remarks  
Franck Varenne, Gemass, Paris Sorbonne Université, France