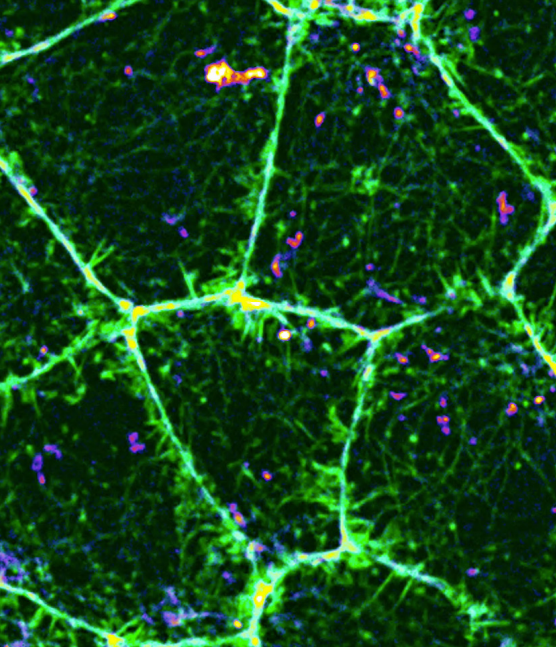




CHAIRE DYNAMIQUES DU VIVANT

Année académique 2018-2019



COLLÈGE  
DE FRANCE  
— 1530 —

Thomas LECUIT

Professeur

## Controlled and Self-organised Morphogenesis

Contrôle et auto-organisation des processus  
morphogénétiques

Vendredi 22 mars 2019, de 9h à 18h

Amphithéâtre Maurice Halbwachs

### Programme des interventions :

|       |                                                                                                                                          |
|-------|------------------------------------------------------------------------------------------------------------------------------------------|
| 09h00 | Ewa PALUCH, <i>university College London</i><br>Morphogenesis across scales: molecular control of cellular shape                         |
| 09h30 | Karen ALIM, <i>Max Planck Institute Göttingen</i><br>Fluid flows organising morphology                                                   |
| 10h00 | Marie-Hélène VERLHAC, <i>Collège de France</i><br>Modulation of gene expression by an actin-dependent pressure gradient in mouse oocytes |
| 10h30 | Pause                                                                                                                                    |
| 11h00 | Edwin MUNRO, <i>university of Chicago</i><br>Dynamic coupling of adhesion, signaling and force generation during neural tube closure     |
| 11h30 | Jean-Léon MAÎTRE, <i>Institut Curie</i><br>Hydraulic fracturing and coarsening position the lumen of the mouse blastocyst                |
| 12h00 | Guillaume SALBREUX, <i>Crick Institute London</i><br>Physics of epithelial flows and folds                                               |
| 12h30 | Déjeuner                                                                                                                                 |
| 14h00 | Maria LEPTIN, <i>EMBL Heidelberg</i><br>Cell shape changes in a folding epithelium: genetically and mechanically determined boundaries   |
| 14h30 | Jérôme GROS, <i>Institut Pasteur</i><br>Mechanical control of avian gastrulation                                                         |
| 15h00 | Suzanne EATON, <i>Max Planck Institute Dresden</i><br>Molecular mechanisms underlying epithelial viscoelasticity in the Drosophila wing  |
| 15h30 | Pause                                                                                                                                    |
| 16h00 | Edouard HANNEZO, <i>IST Vienna</i><br>Bulk actin dynamics drives active phase segregation in zebrafish oocyte                            |
| 16h30 | Olivier POURQUIÉ, <i>Harvard Medical School</i><br>Physical principles underlying patterning of the vertebrate body axis                 |
| 17h00 | Cliff TABIN, <i>Harvard Medical School</i><br>Signals and forces patterning the intestinal smooth muscle                                 |