**Event Schedule**

**Tuesday, September 11**

8h00 - 9h00  Registration

9h10 - 9h15  Introduction

9h15 - 11h00  **Session 1**

*Invited speaker: Daniel St Johnston* (University of Cambridge - UK)
*Alternative modes of epithelial polarity*

*Jonathan Fouchard* (University College London - UK)
*Basal constriction generates spontaneous curvature governing 3D substrate-free epithelial monolayer shape*

*Invited speaker: Aryeh Warmflash* (Rice University - Houston, USA)
*Self-organizing stem cell systems to study early human development*

*Steffen Rulands* (Max Planck Institute - Dresden, Germany)
*Collective oscillations in DNA methylation during exit from pluripotency*

11h00 - 11h40  **Coffee Break**

11h40 - 12h40  **Session 2**

*Turing Lecture: Ben Simons* (University of Cambridge - UK)
*Emergent phenomena in tissue stem cell biology*

12h40 - 14h10  **Lunch and Poster set-up**

14h10 - 15h40  **Session 3**

*Invited speaker: Aleksandra Walczak* (ENS - Paris, France)
*Prediction in immune repertoires*

*Etienne Loiseau* (Aix-Marseille Univ. - France)
*The spatiotemporal organization of cilia activity drives multiscale circular flows of mucus in reconstituted human bronchial epithelium*

*Jean-Daniel Julien* (Max Planck Institute - Göttingen, Germany)
*A model for the organisation of contractions and fluid flows in the slime mould Physarum polycephalum*

*Invited speaker: Yoël Forterre* (Aix-Marseille Univ. - France)
*Gravisensing in plants relies on an active granular medium*

15h40 - 17h10  **Coffee break and Poster session - EVEN NUMBERS**

17h10 - 18h25  **Session 4**

*Invited speaker: Andreas Herz* (Ludwig-Maximilians-Universität - Munich, Germany)
*Decoding the population activity of grid cells for spatial localization and goal-directed navigation*

*David Brücker* (Ludwig-Maximilians-Universität - Munich, Germany)
*Stochastic Nonlinear Dynamics of Confined Cell Migration*

*Invited speaker: Rosa Cossart* (Aix-Marseille Univ., INSERM - France)
*Cortical hub neurons: when theoretical predictions feed experiments*

18h30  **Aperitif & Dinner**
Event Schedule

Wednesday, September 12

8h30 - 9h00  Welcoming coffee

9h15 - 10h45  Session 5

Invited speaker: Pavel Tomančák (Max Planck Institute - Dresden, Germany)
A new force awakens: comparative approach to tissue morphogenesis in insects

Guy Blanchard (University of Cambridge - UK)
Radially patterned cell behaviours drive tube budding from an epithelium

Marija Matejčić (Max Planck Institute - Dresden, Germany)
A non-cell autonomous actin redistribution enables isotropic retinal growth

Invited speaker: Marie-Hélène Verlhac (Collège de France - Paris, France)
Aberrant cortical tension generates aneuploidy in oocytes

10h45 - 11h20  Coffee Break

11h20 - 12h35  Session 6

Sandra Lemke (Max Planck Institute - Martinsried, Germany)
A small proportion of Talin molecules transmit forces to achieve muscle attachment in vivo

Invited speaker: Pere Roca-Cusachs (IBEC - Barcelona, Spain)
The molecular clutch model as a framework to understand integrin-mediated mechanotransduction

Sham Tlili (Mechanobiology Institute, National University of Singapore - Singapore)
The interplay between mechanical forces and cell differentiation drives shape formation in the developing zebrafish myotome

12h35 - 14h20  Lunch and Poster session - ODD NUMBERS

14h20 - 15h20  Session 7

Bragg Lecture: Terence Hwa (University of California - San Diego, USA)
Dimension Reduction by Cells

15h20 - 16h00  Coffee Break

16h00 - 17h15  Session 8

Invited speaker: Tâm Mignot (Aix-Marseille Univ., CNRS - France)
Linking single cell behaviors to the formation of multicellular patterns in a social bacterium

Clara Essmann (University College London - UK)
Mechanical sensing of damage?

Invited speaker: Kristian Franze (University of Cambridge - UK)
The molecular control of microtubule orientation in neurons

17h15 - 17h30  Prizes & closing remarks

Anaïs Bailles (Aix-Marseille Univ., CNRS - France)
A self-organized mechanical cycle underlies a tissue contractile wave and polarizes morphogenesis of the Drosophila endoderm