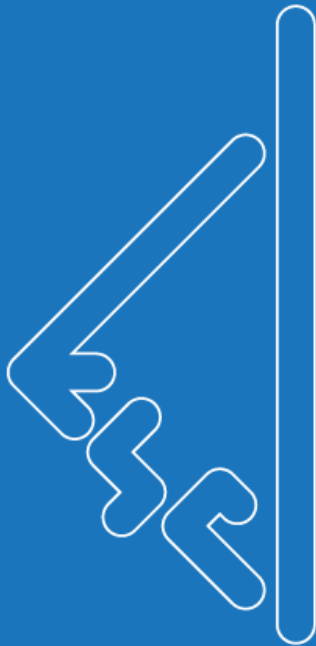


2019

30 Sept
04 Oct



**INSTITUT
D'ÉTUDES
SCIENTIFIQUES
DE CARGÈSE**



SELF-ORGANIZATION IN MULTICELLULAR SYSTEMS

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Scientific program

Monday, September 30

14h00
17h20

CENTURI registration

15h00

Check-in at the IESC

17h25
18h30

Welcome speach & Keynote

17h30
18h30

Guy Theraulaz (CRCA - Toulouse, France) - *Self-organization in social insects*

18h30
19h45

Welcoming drink

20h00

Dinner in Cargèse



Scientific program

Tuesday, October 01

09h00
12h10

Session 2

09h00
09h40

Anna Kicheva (ISR Austria, Weißbriach) - *Coordination of progenitor specification and growth in the developing spinal cord*

09h40
10h20

William Bement (University of Wisconsin, USA) - *An excitable cortical circuit that supports both cell division and pulsed contractions*

10h20
10h50

Coffee break

10h50
11h10

Chii Chan (EMBL Heidelberg, Germany) - *A bottom-up approach to study the interplay between signaling and mechanics in mouse blastocysts*

11h10
11h30

Claudio Collinet (IBDM, Marseille, France) - *Transcriptional induction and mechanical propagation of a morphogenetic wave during invagination of the Drosophila endoderm*

11h30
12h10

Orion Weiner (University of California, San Francisco, USA) - *Self-organization of actin nucleators supports cell shape and movement*

12h10
14h00

Lunch break

14h00
18h40

Session 3

14h00
14h40

Jean-François Rupprecht (CPT, Marseille, France) - *Modelling active stress fluctuations from the cell cortex to the tissue scale*

14h40
15h00

Quentin Vagne (Center for Systems Biology, Dresden, Germany) - *From sphere to tube and tube to network: The story of bile canaliculi growth in the liver lobule*

15h00
15h40

Michael Sixt (IST Austria, Klosterneuburg) - *Leukocyte navigation in complex environments*

15h40
17h40

Poster session

17h40
18h00

Arghyadip Mukherjee (Max Planck Institute, Dresden, Germany) - *A hydraulic instability regulates cell death and Oocyte size selection in C.elegans germline*

18h00
18h40

Olivier Hamant (ENS Lyon, France) - *Mechanical signals contribute to plant development*

20h00

Dinner in Cargèse



Scientific program

Wednesday, October 02

09h00
12h15

Session 4

09h00
09h40

Veronica Grieneisen (Cardiff University, UK) - *Self-organization through the mesoscale, lessons from plant patterning and adaptive responses*

09h40
10h00

Luciano Marcon (Andalusian Center for Development Biology, Seville, Spain) - *A bi-stable reaction-diffusion mechanism for size-independent symmetry breaking of mouse embryoid bodies*

10h00
10h20

Benoit Sorre (Université Paris Diderot, France) - *ESC differentiation on micro-patterned substrates to study Antero-Posterior axis formation in mouse and human*

10h20
10h50

Coffee break

10h50
11h30

James Briscoe (Francis Crick Institute, London, UK) - *The Dynamics of Spinal Cord Development*

11h30
11h50

Noriko Hiroi (Keio University, Yokohama, Japan & Sanyo-Onoda City University, Yamaguchi, Japan) - *Controlling cell-culturing environment with humoral factor diffusion and shear stress*

11h50
12h15

Anna Erzberger & Adrian Jacobo (Howard Hughes Medical Institute and Laboratory of Sensory Neuroscience, The Rockefeller University, New York, USA) - *Symmetry breaking during morphogenesis of a mechanosensory organ*

12h15
14h00

Lunch break

14h00
18h20

Session 5

14h00
14h40

Ottoline Leyser (University of Cambridge, UK) - *Competition and reinforcement in the regulation of axillary bud activity*

14h40
15h00

Ajay Chitnis (Eunice Kennedy Shriver National Institute of Child Health and Human Development, Bethesda, USA) - *Molecules, Mechanics and Models of the Migrating Zebrafish Lateral Line primordium*

15h00
15h40

Orly Reiner (Weizmann Institute of Science, Rehovot, Israel) - *LIS1 inside out: from gene transcription to biomechanics*

15h40
17h40

Poster session

17h40
18h20

Matthew Krummel (University of California, San Francisco, USA) - *Immunity in 5 dimensions*

20h00

Dinner in Cargèse



Scientific program

Thursday, October 03

09h00
12h10

Session 6

09h00
09h40

Alessandro Treves (SISSA, Trieste, Italy) - *Modelling active stress fluctuations from the cell cortex to the tissue scale*

09h40
10h00

Sham Tlili (IBDM, Marseille, France) - *Shaping the zebrafish myotome by differential friction and active stress*

10h00
10h20

Paul Villoutreix (LIS, Marseille, France) - *What is the function of form? A data-driven inquiry into developmental biology*

10h20
10h50

Coffee break

10h50
11h30

Fred Wolf (Max Planck Institute for Dynamics and Self-Organization, Göttingen, Germany) - *Self-Organization in Neural Circuit Evolution*

11h30
12h10

Nathalie Stroeymeyt (University of Bristol, UK) - *A simple movement rule for spatial division of labour in social insects*

12h15
14h00

Lunch break

14h00
18h30

Free time

20h00

Dinner at IESC



Scientific program

Friday, October 04

09h00
12h15

Session 7

09h00
09h40

Hervé Rouault (CPT-Inmed, Marseille, France) - *Brain representations of the sense of direction*

09h40
10h00

Raphaël Clément (IBDM, Marseille, France) - *Regulation of hierarchy and self-renewal in Drosophila neural tumors*

10h00
10h20

Yee Han Tee (Mechanobiology Institute, Singapore) - *Actin polymerization and filament cross-linking determine chirality of individual cells and cell groups*

10h20
10h50

Coffee break

10h50
11h30

Sean Megason (Harvard Medical School, Boston, USA) - *Building pattern: adhesion based self-organization coordinates patterning and morphogenesis*

11h30
11h50

Audrey Gerard (University of Oxford, UK) - *CD8 T cell collective behaviour in health and disease*

11h50
12h15

Simon Gsell & Etienne Loiseau (M2P2 & CiNam, Marseille, France) - *Long-range directional organization of ciliary beats in reconstituted bronchial epithelium*

12h30
14h00

Lunch break

14h00
15h00

Session 8

14h00
14h20

Nicolas Garcia-Seyda (CIML- LAI, Marseille, France) - *Microfluidic tools to image chemotaxis of non-adherent leukocytes*

14h20
15h00

Ana-Maria Lennon-Duménil (Institut Curie, Paris, France) - *Impact of Mechanical Stress on the Immune-surveillance function of dendritic cells*

15h00
15h30

Coffee break

15h30
16h40

Concluding remarks

20h00

Dinner in Cargèse

