



PHYSICS OF CELL FATE DECISIONS

Selected poster presentations

No.	Session	Name	Poster title
1	Session 1	Aguirre Tamaral Adrian	Decoding Pattern Formation Mechanisms: The physics behind morphogen transport
46	Session 2	Ayyappan Vinay	Uncovering rules governing self-organization of gastruloid morphology
2	Session 1	Betjes Max	Cell patterning in the the intestinal crypt
3	Session 1	Bogdziewicz Léa	Single plant cells: from destruction to reconstruction
6	Session 2	Böhm Sebastian	Studying the underlying principles of organ size control using restorative growth assay in vitro
4	Session 1	Borbely Reka	Optimal regimes of regulatory sequence evolution
5	Session 1	Bowen Amy	Robustness of pattern proportions during growth
7	Session 1	Chang Chia-Teng	Temporal Dynamics of Morphogen-Encoded Positional Information at Single-Cell Resolution During Tissue Morphogenesis
8	Session 1	Corridori Clelia	Unveiling Gene Perturbation Effects through Gene Regulatory Networks Inference from single-cell transcriptomic data
9	Session 1	Di Franco Jasmin	Is the cellular jamming transition universal?
10	Session 1	Dullweber Tim	Mechanochemical feedback drives neuron-like signaling dynamics
11	Session 1	Friedman Leah	Precise and scalable self-organization in mammalian pseudo-embryos
12	Session 1	Ghasemi Nasab Mohammad Salar	Pattern formation in tissues with heterogeneous motility and rigidity
13	Session 1	Harish Rohit Krishnan	Regulation of spinal cord size during mouse development
14	Session 1	Haslhofer Felix	Enhancer-enhancer interaction helps bridging genomic distance.
15	Session 1	Iyer Krishnan	Cellular Compartmentalisation and Receptor Promiscuity as a strategy for Accurate and Robust Inference of Position during Morphogenesis
16	Session 1	Journot Robin	Symmetry breaking and self-organization of bi-layered epithelia are orchestrated by conserved signals during development and regeneration
17	Session 1	Kishi Kasumi	Regulation of size and shape of the notochord during mouse development
18	Session 1	Kochańczyk Marek	Nonself RNA rewires IFN- β signaling: A mathematical model of the innate immune response
19	Session 1	Kong Ka Kit	Deriving the phase diagram structure for optimal information integration in biological signaling systems
20	Session 2	Larraguivel Carrillo Hélder David	New class of multimodal Turing patterns
21	Session 1	Leeb Martin	AKT Regulates Pluripotency Transitions Through Gating of FoxO Transcription Factors
22	Session 1	Legait Emma	Deciphering the self-organizing principles governing tumor growth and cellular composition
23	Session 1	Mandal Taniya	Exploring evolutionary variations in forebrain development using patterned organoids
25	Session 2	Marx Konrad	Regulation of cell proliferation in regenerating zebrafish scales
26	Session 2	Matsushita Yuki	Dynamical systems theory of cell differentiation and reprogramming
27	Session 2	Mikoshiba Seiya	Deformation of the embryo affects the direction of cell migration during anterior-posterior axis formation in mouse
24	Session 1	Minchington Thomas	Dorsal morphogens in the regulation of Roof Plate size
28	Session 2	Mishra Nikhil	Cell volume patterning as a mechanism for mitotic phase waves in embryonic development
29	Session 2	Miyazawa Hidenobu	Unveiling a signaling role of metabolism in regulation of developmental timing in mammalian embryos
30	Session 2	Moor Anne-Lena	Trajectory mutual information in biochemical systems: Gaussian vs. Poissonian fluctuations
31	Session 2	Moreno Sebastian	Single-nuclei sequencing reveals cellular heterogeneity and differentiation dynamics within the shoot apical meristem
32	Session 2	Naik Suyash	Keratins contribute to zebrafish epithelial morphogenesis
33	Session 2	Nakamura Yoshiyuki	Evolution of hierarchy and irreversibility in theoretical cellular differentiation model
34	Session 2	Nałęcz-Jawecki Paweł	Information transmission in a cell monolayer: A numerical approach
35	Session 2	Nishide Ryosuke	Novel pattern propagation mechanism: Pattern propagation driven by surface curvature
36	Session 2	Plugers Davey	Evolution of robust cell differentiation under epigenetic feedback
37	Session 2	Prista Santos von Bonhorst Silva Francisco	Differential entropy as an indicator of differentiation in the early mouse embryo
38	Session 2	Ramirez Sierra Michael Alexander	A genuinely spatial-stochastic model of early mouse embryogenesis via deep-learning simulation-based inference
39	Session 2	Robert Corentin	Role of tristability in the robustness of the differentiation mechanism
40	Session 2	Rus Stefanie	Self-organised pattern formation in the developing dorsal neural tube by a temporal relay of BMP signalling
41	Session 2	Russell Nicholas	Understanding cell fate specification and maintenance through giant cell formation in Arabidopsis thaliana sepals
42	Session 2	Salari Hossein	Transcription-dependent genome folding
43	Session 2	Singh Amrita	Role of biomechanics in the regulation of tissue growth during neural tube developmen
44	Session 2	Theodorou Ioannis	Investigating the role of physical signals during vascular cells differentiation in plants
45	Session 2	Tolonen Mari	A workflow to observe single-cell morphogenetic features of developing mucociliary epidermis
47	Session 2	Yampolskaya Maria	Finding signatures of low-dimensional geometric landscapes in high-dimensional cell fate transitions
48	Session 2	Yin Yanbo	DEVELOPMENTAL PATTERNING AND CELL-FATE SPECIFICATION OF THE MOUSE COLONIC EPITHELIUM
49	Session 2	Zhang Alex Chen Yi	Correlation Information and Non-local decoding in development