

Program Joint meeting FOR1759 and SFB937:
 Physics of the embryo 29.09.2013 – 01.10.2013
 Alfred-Hessel-Saal und Vortragsraum, Historisches Gebäude der Nds. Staats- und Universitätsbibliothek
 Papendiek 14, 37073 Göttingen

Sunday, September 29, 2013

17:00	Registration	
18:00	Welcome	
18:00–19:00	Anthony Hyman, Dresden	Why is physics important for biology?
19:00–21:00	Poster session I with mixer (Vortragsraum)	

Monday, September 30, 2013

9:00–9:30	Thomas Gregor, Princeton	Robustness vs. reproducibility in development
9:30–10:00	Stanislav Shvartsman, Princeton	Signaling gradients
10:00–10:30	Gasper Tkacik, Klosterneuburg	Positional informations in bits
10:30–11:00	coffee break	
11:00–11:20	Kinjal Dasbiswas, Rehovot	Contractile stress and morphogen diffusion in developing cell assemblies
11:20–11:40	Gabriel Krens, Klosterneuburg	Interstitial fluid osmolarity controls progenitor cell segregation during zebrafish gastrulation
11:40–12:10	Rudi Winklbauer, Toronto	Tissue cohesion and the mechanics of cell rearrangement
12:10–12:40	Erez Raz, Münster	Motility and directed migration of primordial germ cells in zebrafish
13:00–14:30	Poster session with lunch	
14:30–15:00	Yohanns Bellaiche, Paris	Epithelial cell dynamics
15:00–15:20	Daiki Umetsu, Dresden	Local increases in mechanical tension guide cell sorting at compartment boundaries by constraining junctional dynamics
15:20–15:50	Ewa Paluch, London	Actin cortex mechanics in cell morphogenesis
15:50–16:10	Stefan Günther, Heidelberg	Tissue packing dynamics during morphogenesis of the early <i>Drosophila m.</i> embryo, in toto
16:10–16:40	coffee break	
16:40–17:10	Paul Janmey, Philadelphia	Viscoelastic properties of soft tissue: comparison and contrast with polymer networks
17:10–17:30	JL Maître /T Hiiragi, Heidelberg	Cell-autonomous increase in contractility drives compaction of the mouse embryo
17:30–18:00	Cliff Brangwynne, Princeton	RNA drops, nuclear actin, and gravity
18:00–18:20	Carina Gonnermann, Karlsruhe	Using a side view setup to monitor cell shape changes during AFM adhesion and elasticity measurements
18:30–20:00	Poster session with snacks	

Tuesday, October 1, 2013

9:00–9:30	Jean-Francois Joanny, Paris	Cell division in multicellular spheroids
9:30–10:00	Stephan Grill, Dresden	Morphogenetic functions of actomyosin
10:00–10:30	Frank Jülicher, Dresden	Growth control in developing epithelia
10:30–10:50	Hervé Turlier, Paris	Furrow constriction in animal cell cytokinesis
10:50–11:20	coffee break	
11:20–11:50	Emmanuel Farge, Paris	Mechanotransduction in gastrulating embryos
11:50–12:20	Richard Adams, Cambridge	TBA
12:20–13:20	Boris Shraiman, Santa Barbara	Growth & form and physics
13:30	lunch	