

SFB 1027 – 1st Retreat 24.-25. September 2013

Saarbrücken, Campus, C7 4


Workshop program



Monday, 23rd

- 14:00 -17:00 Lab-Tours (SB, Campus, E2 9, Foyer)
18:00- ... Young scientist get-together at Stiefel Brauhaus (SB, St. Johanner Markt)

Tuesday, 24th

- 09:00 Opening
- 09:10 **A1 Marc Neef**
Cytoskeletal self-organization and cell signalling
Alexander Dreher
A phase field model for amoeboid cell crawling driven by cytoskeletal polarization waves
- 09:50 **A2 Markus Hoth / Rouven Schoppmeyer**
Dynamics of T-cell polarization
- 10:30 Coffee break 
- 11:00 **A3 Heiko Rieger / Martin Peglow / Karsten Schwarz**
Theoretical aspects of T-cell polarization
- 11:40 **A5 Peter Lipp**
Local cPKC-translocation as a mechanism for localized cell responses



12:20

C4 Barbara Niemeyer

Redox regulation of cellular function: T cells and ion channels

Stephanie Saul

The physiological role of the redox resistant calcium channel ORAI3

13:00

Lunch



14:20

A4 Jutta Engel / Tobias Eckrich

Spontaneous activity in the developing cochlea

15:00

A6 Björn Becker

Receptor dynamics, internalization and retrograde transport

15:40

Coffee break



16:10

A7 Mohammad Reza Shaebani

Active Transport on Directed Complex Networks

Chikashi Arita

One-dimensional Stochastic Cellular Automaton - from Mathematics to Transport Models

16:50

B5 Christian Wagner / Mathias Brust

Aggregation of red blood cells in flow

19:00

Workshop dinner



@ Restaurant Undine, Bismarckstraße 129, 66121 Saarbrücken

Wednesday, 25th

09:00

B1 Karin Jacobs / Jonas Heppe / Philipp Hudalla

Theory & Experiments of smart proteins: Ordered adsorption of hydrophobins at interfaces

09:40

B2 Markus Bischoff / N.N.

Bacterial adhesion and biofilm formation: Physical processes at interfaces

10:20

Coffee break





- 10:50 **B3 Matthias Hannig / Natalia Umanskaya**
Bio-inspired management of in situ biofilm formation on dental surfaces
- 11:30 **B4 Jean-Baptiste Fleury / Ralf Seemann**
*Microfluidic platform to study membrane properties:
Transport, Organization, and Fusion of Membranes*
- 12:10 Mitgliederversammlung 
- 13:00 Lunch 
- 14:20 **C1 Albrecht Ott / Marc Schenkelberg**
Macromolecular binding to DNA: cooperative and information theoretical aspects of molecular specificity
- 15:00 **C2 Sascha Zickenrott / Pascal Giehr**
In vivo modeling of hydroxymethylation in mouse ES-cells
- 15:40 Coffee break 
- 16:10 **C3 Volkhard Helms**
Molecular interactions and gene-regulatory networks driving gene expression and cell differentiation
Mohamed Hamed
Hematopoiesis and the possible regulatory role of pluripotency genes and imprinted genes
- 16:50 **C5 Antonio Yarzagaray / Madhurima Dhara**
v-SNARE-based protein-lipid interactions in exocytosis

Thursday, 26th

- 10:00 –
12:00 Hands-on courses, Mini-Lectures