

Applied Mathematics Forum, Tohoku University
Mini-Workshop on
**Modeling, Simulations and Analysis of Biological
Pattern Formation**

venue: Conference Room Aoba, 4th Floor of Heanel Sendai
12-7 Honcho 2-chome, Sendai
(for access, visit <http://www.heanel.jp/access.html>)

October 29, 2010

- 1:25 Opening
- 1:30 - 2:20 Anna Marciniak-Czochra (University of Heidelberg)
Multiscale mathematical models of pattern formation in developmental biology
- 2:30 - 3:10 Madoka Nakayama (Tohoku University)
Continua of stationary solutions of a receptor-ligand model of pattern formation in hydra
- break
- 3:30 - 4:20 Hirokazu Ninomiya (Meiji University)
Non-planar traveling waves of Allen-Cahn equations
- 4:30 - 5:20 Yasumasa Nishiura (Hokkaido University)
Spot dynamics in heterogeneous media and its application to adaptive behaviors of the Physarum plasmodium
- 5:40 - 6:30 Masayasu Mimura (Meiji University)
Model-aided understanding of self-organized patterns in bacterial colonies

October 30, 2010

- 9:45 - 10:35 Kanako Suzuki (Tohoku University)
Patterns in a reaction-diffusion model of early carcinogenesis
- 10:50 - 11:40 Daishin Ueyama (Meiji University)
A mathematical model of Liesegang type precipitation
- 11:50 Closing

Organized by Kanako Suzuki, IIAIR and Izumi Takagi, Mathematical Institute, Tohoku University

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