



**RIMS International Conference:  
“Sapporo summer conference on dynamics of patterns  
in materials science”**

**as a part of RIMS International Project Research 2014  
Toward a New Fusion Research of Mathematics and Materials Science**

**Date : July 31<sup>st</sup> (Thu) – August 2<sup>nd</sup> (Sat), 2014**

**Venue : Room 05-202, 5<sup>th</sup> floor, Mid-Campus Open Laboratory Bldg. No.2,  
Research Institute for Electronic Science(RIES), Hokkaido University  
N12W7, Kita-Ward, Sapporo, Japan**

**Schedule: July 31<sup>st</sup>, 2014**

- 12:30-           **Registration**
- 13:15-13:30   **Opening remark**
- 13:30-14:30   **1 : Arjen Doelman (Leiden University)**  
                    The dynamics of localized structures in ecosystems, in polymer membranes,  
                    and in mathematics
- 14:30-14:45   **Coffee break**
- 14:45-15:45   **2 : Thomas Wanner (George Mason University)**  
                    Nucleation in Three-Component Cahn-Morral Systems
- 15:45-16:15   **Discussion**
- 16:15-17:15   **3 : Shin-Ichiro Ei (Hokkaido University)**  
                    Motion of interacting camphors

**Schedule: August 1<sup>st</sup>, 2014**

- 10:00-11:00   **4 : Edgar Knobloch (University of California, Berkeley)**  
                    Crystalline and quasicrystalline structures in soft matter systems
- 11:00-11:15   **Coffee break**
- 11:15-12:15   **5 : Takeshi Takaishi (Hiroshima Kokusai Gakuin University)**  
                    A phase-field approach to 3 dimensional crack growth
- 12:15-14:00   **Lunch**
- 14:00-15:00   **6 : Elliott Ginder (Hokkaido University)**  
                    Curvature-driven interfacial acceleration via threshold dynamics

15:00-15:15 **Coffee break**

15:15-16:15 **7 : Shigeki Akiyama (University of Tsukuba)**  
Mathematics on quasi-crystal structure

16:15-16:30 **Discussion**

16:30-17:30 **8 : Natsuhiko Yoshinaga (Tohoku University)**  
Spontaneous motion and deformation of a droplet driven by chemical reaction

**Schedule:** August 2<sup>nd</sup>, 2014

10:00-11:00 **9 : Theodore Kolokolnikov (Dalhousie University)**  
On fast-moving criminals and chemotaxis

11:00-11:15 **Coffee break**

11:15-12:15 **10 : Toshiyuki Nakagaki (Hokkaido University)**  
Common mechanics of mode switching in locomotion of limbless and legged animals

12:15-12:30 **Closing**

**Organizing Committee :**

Yasumasa Nishiura (Tohoku University), Chair  
Motoko Kotani (Tohoku University), Co-Chair  
Hisashi Okamoto (Kyoto University)  
Nobuaki Obata (Tohoku University)  
Ken Nakajima (Tohoku University)  
Carlos J. Garcia-Cervera (University of California, Santa Barbara)  
Thomas P. Russell (University of Massachusetts)

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- Grants-in-Aid for Scientific Research <KAKENHI> (JSPS) [A] 26247015, Yasumasa Nishiura.