The 18th Northeastern Symposium on Mathematical Analysis

Date： 20‑21 February 2017

Venue： Kawai Hall, Graduate School of Science, Tohoku University
(at Kita-Aobayama Campus)
6-3, Aramaki Aza-Aoba, Aoba-ku,Sendai 980-8578
http://www.sci.tohoku.ac.jp/english/access/

URL: http://www.math.sci.hokudai.ac.jp/sympo/nema/18_en.html

Program

20 February 2017

09:30‑09:40	Opening
09:40‑10:30	Eiji Yanagida (Tokyo Institute of Technology) Some optimization problems arising in population biology
10:40‑11:20	Nao Hamamuki (Hokkaido University) Two approaches to an approximation of a distance function to moving interfaces
11:30‑12:10	Toru Kan (Tokyo Institute of Technology) Bifurcation analysis for stationary solutions of bistable reaction diffusion equations
12:10‑13:30	Lunch (80min)
13:30‑14:10	Reika Fukuizumi (Tohoku University) Long time behaviour of Gross-Pitaevskii equation at positive temperature
14:20‑15:00	Jan Brezina (Tokyo Institute of Technology) On a dimension reduction for the full Navier-Stokes-Fourier system
15:00‑15:20	Break (20min)
15:20‑15:50	Lami Kim (Tokyo Institute of Technology) On the mean curvature flow of grain boundaries
15:55‑16:15	Takahiro Kosugi (Tohoku University·D3) Equivalence between viscosity solutions of an obstacle problem and a gradient constraint problem

16:15 - 18:10	Poster Session **at Aoba Science Hall (in Science Complex C Bldg, 2nd Floor)**
18:30 -	Banquet at AOSIS (near Kawai Hall)

21 February 2017

10:40 - 11:20	Tsukasa Iwabuchi (Tohoku University) On the ill-posedness for some parabolic equations in the Besov spaces
11:30 - 12:00	Kyouhei Wakasa (Muroran Institute of Technology) Global existence for nonlinear wave equations with the quadratic term in four space dimensions
12:00 - 13:40	Lunch (100min)
13:40 - 14:20	Norbert Požár (Kanazawa University) A level set method for the crystalline mean curvature flow
14:30 - 15:00	Patrick Tolksdorf (TU Darmstadt) Estimates for the Stokes resolvent subject Neumann boundary conditions in bounded convex domains
15:00 - 15:20	Break (20min)
15:20 - 15:40	Takashi Kagaya (Tokyo Institute of Technology·D3) A contact angle condition for varifolds
15:45 - 16:05	Kurumi Hiruko (Tohoku University·D3) Stability of hybrid control governed by PDE-ODE systems: mathematical analysis on intermittent hormonal therapy
16:10 - 16:30	Ryuichi Sato (Tohoku University·D3) Heat equation with a nonlinear boundary condition and growing initial data
16:30 - 16:50	Closing

Posters

1. Lorenzo Cavallina (Tohoku University, D2)
   Locally optimal configurations for the two-phase torsion problem in the ball

2. Ikki Fukuda (Hokkaido University, M2)
   Asymptotic behavior of solution to the generalized Korteweg-de Vries-Burgers equation

3. Ken Furukawa (The University of Tokyo, M2)
   Stability of 3-D small Oseen type flows under large perturbation

4. Shoichi Hasegawa (Tohoku University, D3)
   Classification of radial solutions to a Hénon type equation on the hyperbolic space

5. Kotaro Hisa (Tohoku University, M2)
   Solvability of the heat equation with a nonlinear boundary condition

6. Kenta Itasaka (Hokkaido University, M1)
   On the Local Well-Posedness of the Benjamin-Ono Equation in $B_{2,1}^{9/8}$

7. Makoto Naito (Tohoku University, M2)
   On the rate of convergence of approximate solutions for obstacle problems

8. Takayuki Niimura (Hokkaido University, M2)
   Attractors and their stability with respect to rotational inertia for a nonlocal extensible beam equation

9. Kojiro Okabayashi (Tohoku University, M2)
   Viscosity solutions of Hamilton-Jacobi equations in metric spaces

10. Takumi Omiya (Tohoku University, M2)
    Maximal regularity for heat equations in non-reflexive Banach spaces

11. Albert Rodríguez Mulet (Hokkaido University, D1)
    Eigenfrequencies of a column-shaped thin elastic body

12. Kento Seraku (Tohoku University, M2)
    Logarithmic Sobolev inequalities and the uncertainty principle

13. Jin Takahashi (Tokyo Institute of Technology)
    Solvability of a semilinear parabolic equation with measures as initial data

14. Shota Tateyama (Tohoku University, D1)
    The Phragmén-Lindelöf theorem for fully nonlinear parabolic equations

15. Hiroshi Wakui (Tohoku University, D3)
    Non-uniform bound and finite time blow up for solutions to a degenerate drift-diffusion equation with the mass critical exponent

16. Atsushi Watanabe (Tohoku University, M2)
    Existence of solutions of the Finsler heat equation

17. Toshiaki Yachimura (Tohoku University, M2)
    Two-phase eigenvalue problem on thin domains with Neumann type boundary condition

Organizing Committee

Goro Akagi (Tohoku University)
Jun Masamune (Hokkaido University)
Ryo Takada (Tohoku University)