

The 22nd Northeastern Symposium on Mathematical Analysis

Date: 15–16, February, 2021

Program

February 15 (Mon.)

- 9:50 - 10:00 Opening
- 10:00 - 10:50 Kazuhiro Ishige (The University of Tokyo)
When is quasi-concavity preserved by Dirichlet heat flow?
- 11:00 - 11:50 Keisuke Takasao (Kyoto University)
On obstacle problem for Brakke's mean curvature flow
- 12:00 - 13:30 Lunch Break
- 13:30 - 13:50 Ryunosuke Mori (Tokyo Institute of Technology)
Mathematical analysis of a reaction-diffusion model for Neolithic transition in Europe
- 13:50 - 14:10 Ryosuke Nakasato (Tohoku University)
Global well-posedness for the Hall-MHD system in the critical Fourier-Besov space
- 14:10 - 14:30 Koichi Komada (Tohoku University)
Existence of blow-up solutions for quantum Zakharov system
- 14:45 - 15:05 Alexandra Gilsbach (Tokyo Institute of Technology)
Stability analysis for Serrin's overdetermined problem
- 15:05 - 15:25 Philip Schrader (Tohoku University)
Curve shortening by the gradient of a Sobolev-Riemannian metric
- 15:25 - 15:45 Michał Łasica (Polish Academy of Sciences / The University of Tokyo)
Existence of the 1-harmonic map flow
- 16:00 - 16:20 Poster Preview
- 16:20 - 18:20 Poster Session

February 16 (Tue.)

- 10:00 - 10:50 Izumi Takagi (Tohoku University)
Pattern formation in a non-uniform environment—A scenery in Turing’s sight
- 11:00 - 11:30 Takiko Sasaki (National Institute of Technology, Ibaraki College
/ Tohoku University)
Regularity of the blow-up curve at characteristic points for the nonlinear wave equation
- 11:40 - 12:10 Ikki Fukuda (Shinshu University)
Effect of a fractional dispersion term on the asymptotic behavior of the solutions to the Burgers type equations
- 12:10 - 13:30 Lunch Break
- 13:30 - 14:20 Borislav Yordanov (Hokkaido University)
Low frequency asymptotics for dissipative evolution equations in Banach spaces and application
- 14:30 - 15:00 Izumi Okada (Kyushu University)
The heat equation with a dynamic Hardy-type potential
- 15:10 - 15:30 Asato Mukai (The University of Tokyo)
Refined construction of type II blow-up solutions for semilinear heat equations with Joseph-Lundgren supercritical nonlinearity
- 15:30 - 15:50 Tomoyuki Oka (Tohoku University)
Qualitative space-time homogenization for nonlinear diffusion equations
- 15:50 - 16:10 Yujiro Tateishi (The University of Tokyo)
Decay estimates for Schrödinger heat semigroup with inverse square potential in Lorentz spaces
- 16:20 - 16:40 Poster Award Ceremony and Closing
- 19:30 - Banquet

Organizers:

- Satoshi Tanaka (Tohoku University)
Nao Hamamuki (Hokkaido University)
Shinya Okabe (Tohoku University)
Kentaro Fujie (Tohoku University)