## The 21st Northeastern Symposium on Mathematical Analysis

Venue Department of Mathematics, Hokkaido University Room 3-309

Date 17-18 February 2020

 $\mathbf{URL}\ \mathrm{https://www.math.sci.hokudai.ac.jp/sympo/nema/21.html}$ 

## Program

February	17	(Monday)
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10:00-10:50	Ngô Quôc Anh (Vietnam National University, Hanoi / The University of Tokyo)
	On sharp functional inequalities, stories from the work of Hardy-Littlewood-Sobolev
11:00-11:50	Yohei Fujisima (Shizuoka University)
	Optimal singularities of initial functions for the solvability of a semilinear parabolic system
13:20-14:00	Motohiro Sobajima (Tokyo University of Science)
	Higher order asymptotic expansion for abstract linear hyperbolic equations
14:10-14:30	Conghui Zhang (Tohoku University)
	Formation of stable patterns for a reaction-diffusion-ODE system in a spatially heterogeneous
	environment
14:30-14:50	Yuka Teramoto (Tokyo Institute of Technology)
	Hopf bifurcation in artificial compressible system for doubly diffusive convection
14:50-15:10	Kenta Nakamura (Tohoku University)
	Global existence for the $p$ -Sobolev flow
15:20-15:40	Takuya Sato (Tohoku University)
	$L^2$ -decay for the dissipative nonlinear Schrödinger equation with the critical power nonlinearity
	in the Gevrey class
15:40-16:00	Nobuhito Miyake (Tohoku University)
	Existence of nontrivial positive solutions to the Cauchy problem for linear and semilinear
	biharmonic heat equation
16:00-16:20	Poster Preview
16:30-17:45	Poster Session (5F&6F Common Spaces, 3rd Science Building)

## February 18 (Tuesday)

Banquet (Restaurant Elm)

10:00-10:50 Takahiro Hasebe (Hokkaido University)

18:00-

	Discrete eigenvalues of random matrices
11:00-11:50	Yasushi Taniuchi(Shinshu University)
	Some logarithmic inequalities and the Navier-Stokes equations
13:30-14:00	Tatsu-Hiko Miura (Kyoto University)
	Singular limit problem for the Navier-Stokes equations in a curved thin domain
14:00-14:20	Toshiaki Yachimura (Tohoku University)
	On a Robin inverse eigenvalue problem related to thin coating problems

14:30-14:50 Yuki Tsukamoto (Tokyo Institute of Technology)
Existence of solutions for the prescribed anisotropic mean curvature equation
14:50-15:10 Kuniyasu Misu (Hokkaido University)
Asymptotic shape of solutions to the mean curvature flow equation with a discontinuous source term
15:10-15:30 Yuki Ueda (Hokkaido University)
Haagerup-Möller type limit theorems and free max-convolution
15:40-16:00 Poster Award Ceremony & Closing

Organizers: Hideo Kubo (Hokkaido University)
Norisuke Ioku (Tohoku University)

Jun Masamune (Hokkaido University)