

# International Conference: Mathematical Analysis of Nonlinear Partial Differential Equations

November 13–15, 2013

Kyushu University Nishijin Plaza, Fukuoka, Japan

## Organizing Committee

Yoshiyuki Kagei (*Kyushu University*)

Tohru Nakamura (*Kyushu University*)

Shinya Nishibata (*Tokyo Institute of Technology*)

Mari Okada (*Yamaguchi University*)

Yoshihiro Ueda (*Kobe University*)

## Program

### November 13 (Wednesday)

- 10:00~10:50 Tai-Ping Liu (*Academia Sinica, Taiwan; Stanford University*)  
Shock Waves for Kawashima Systems
- 11:00~11:50 Tatsuo Iguchi (*Keio University*)  
On the thin film approximation for the flow of a viscous incompressible fluid down an inclined plane
- 14:00~14:50 Wen-An Yong (*Tsinghua University*)  
Newtonian limit of Maxwell fluid flows
- 15:00~15:50 Takayuki Kobayashi (*Saga University*)  
 $L^2$  boundedness of the solutions to the 2D Hyperbolic Navier-Stokes equations
- 16:10~17:00 Hideo Kozono (*Waseda University*)  
Leray's problem on D-solutions to the stationary Navier–Stokes equations past an obstacle

### November 14 (Thursday)

- 10:00~10:50 Reinhard Racke (*University of Konstanz*)  
Formation of singularities in one-dimensional thermoelasticity with second sound
- 11:00~11:50 Takayoshi Ogawa (*Tohoku University*)  
Maximal  $L^1$  regularity and application to the Cauchy problem of compressible Navier–Stokes–Poisson system in critical space

- 14:00~14:50 Zhouping Xin (*The Chinese University of Hong Kong*)  
On the global existence and asymptotic behavior of solutions to the multi-dimensional compressible Navier-Stokes system in the presence of vacuum
- 15:00~15:50 Peicheng Zhu (*University of the Basque Country; IKERBASQUE Foundation for Science*)  
New Phase-Field Models for Solid-Solid Phase Transitions Driven by Material Forces
- 16:10~17:00 Akitaka Matsumura (*Osaka University*)  
Large-time behavior of solutions for a one-dimensional system of non-viscous and heat-conductive ideal gas
- 18:30~ Banquet at Nishitetsu Grand Hotel “Ho-oh (鳳凰の間)”

#### November 15 (Friday)

- 10:00~10:50 Jaime E. Muñoz Rivera (*Federal University of Rio de Janeiro*)  
The lack of exponential stability to N-dimensional transmission problem with localized Kelvin Voigt dissipation
- 11:00~11:50 Taku Yanagisawa (*Nara Women's University*)  
On the solvability of boundary value problems for the stationary MHD equations with inhomogeneous boundary conditions
- 14:00~14:50 Enrique Zuazua (*BCAM & Ikerbasque*)  
Control and numerical simulation in large time horizons
- 15:00~15:50 Kazuhiro Kurata (*Tokyo Metropolitan University*)  
A remark on an optimal configuration of the limiting problem to a one dimensional phase separation problem

## **Sponsors**

This conference is supported by JSPS Grant-in-Aid for Scientific Research.

- Basic Research (S) 24224003 (H. Kozono)
- Basic Research (S) 25220702 (T. Ogawa)
- Basic Research (A) 22244009 (S. Kawashima)
- Basic Research (B) 22340027 (S. Nishibata)
- Basic Research (B) 24340028 (Y. Kagei)