Regularity and Singularity for Geometric Partial Differential Equations and Conservation Laws

at Resarch Institute of Mathematical Science

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Date and Time : Wednesday, June 8, 2011; 14:00– Friday, June 10, 2011; 14:20

Place : kyoudai-SuriKaisekiKenkyujo Room 420, Kitashirakawa-Oiwake-cho, Sakyo-ku, Kyoto 606-8502,

Schedule

June 8, Wednesday

14:00–14:50 Goro Akagi (Kobe University)
Stability and instability of asymptotic profiles of solutions for fast diffusion equations

15:00–15:50 Nobumitsu Nakauchi (Yamaguchi University)
Variational problems for the conformality of maps and for pullback metrics

16:10–17:00 Kenichi Ito (Tsukuba Univeristy)
Scattering theory from a geometric view point

June 9, Thursday

10:00–10:50 Zensho Yoshida (University of Tokyo)
Singular Casimir Elements of the Euler Equation

11:00–11:50 Hideo Kubo (Tohoku University)
Lower bound of the lifespan of solutions to nonlinear elastic wave equations

Lunch

14:00–14:50 Mishio Kawashita (Hiroshima University)
Asymptotic behaviour of the resolvent and enclosure method for the heat equations in bounded domains with a cavity

15:00–15:50 Norihisa Ikoma (Waseda University)
Existence of eigenvalues and eigenfunctions for radially symmetric fully nonlinear elliptic operators

16:10–17:00 Shigeaki Koike (Saitama University)
On the ABP maximum principle and applications

June 10, Friday

10:10–11:00 Yoshihiro Sawano (Kyoto University)
Olsen's inequality and its applications to the MHD equations

11:10–12:00 Masanori Hino (Kyoto University)
Differential-like structures associated with strong local Dirichlet forms

Lunch

13:30–14:20 Norisuke Ioku (Tohoku University)
Mean oscillation estimates for the inhomogeneous heat equations in the spatial two dimensional case

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