

数理解析研究所講究録 1389

調和解析学と非線形偏微分方程式

京都大学数理解析研究所

2004年7月

Workshop on Harmonic Analysis and Nonlinear Partial Differential Equations

Research Institute for Mathematical Sciences, Kyoto University
Room No. 420

Monday, July 7, 13:30 — Wednesday, July 9, 11:45, 2003

Organizer: Masao Yamazaki (Waseda Univ.)
e-mail: masao.yamazaki@waseda.jp

Monday, July 7

13:30–14:30 Hiroaki Aikawa (Shimane Univ.)

Fatou and Littlewood theorems for nonintegrable kernels

14:45–15:45 Yasuo Komori (Tokai Univ.)

Singular integral and cancellation property

16:00–17:00 Takashi Ichinose (Kanazawa Univ.)

Recent results on the selfadjoint Trotter-Kato product formula
in operator norm with open problems

18:30– Banquet

Tuesday, July 8

9:45–10:45 Kunio Hidano (Mie Univ.)

Kazuyoshi Yokoyama (Hokkaido Inst. Tech.)

A new proof of the global existence theorem of Klainerman

10:55–11:40 Shuji Yoshikawa (Tohoku Univ.)

Weak solution for the Falk model system of shape memory alloys

13:15–14:00 Jun-Ichi Segata (Kyushu Univ.)

Well-posedness for the Boussinesq-type system related to the
water wave

14:10–14:55 Xu Bin (Univ. of Tokyo)

Derivatives of spectral function and Sobolev norms of
eigenfunctions on a closed Riemannian manifold

15:05–15:50 Jun Kato (Hokkaido Univ.)

On some generalized weighted Strichartz estimates for the wave equation and application to self-similar solutions in low space dimensions

16:00–17:00 Michael F. Christ (Univ. of California, Berkeley)

James Colliander (Univ. of Toronto)

Terence Tao (Univ. of California, Los Angeles)

Recent progress on the nonlinear Schrödinger evolution problem

Wednesday, July 9

9:45–10:30 Takayuki Kubo (Waseda Univ.)

Yoshihiro Shibata (Waseda Univ.)

L^p - L^q estimates of Stokes semigroup in the exterior domain of \mathbb{R}_+^n

10:45–11:45 Yasushi Taniuchi (Shinshu Univ.)

On 2-D Euler equations with initial vorticity in bmo

