## 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 soluiton 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.)

 $L^p\text{-}L^q$  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