## Workshop on Harmonic Analysis and Nonlinear Partial Differential Equations

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

Monday, July 8, 13:30 — Wednesday, July 10, 12:05, 2002

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

Monday, July 8

13:30–14:30 Eiichi Nakai (Osaka Kyouiku Univ.) Hardy Spaces and Generalized Fractional Integrals

14:45–15:30 Reika Fukuizumi (Tohoku Univ.) Stability of Standing Waves for Nonlinear Schrödinger Equations with Double Power Nonlinearity

15:45–17:00 Christopher D. Sogge (Johns Hopkins Univ.)
Almost Global and Global Existence for Nonlinear Wave
Equations Outside of Obstacles

Tuesday, July 9

9:45–10:45 Takuya Sobukawa (Okayama Univ.)

The Relation between the Extrapolation Estimates

11:00–12:00 Takahiro Mizuhara (Yamagata Univ.) Some Factorization Theorem for Hardy Spaces and Commutators on Morrey Spaces

13:30–14:30 Hiroyuki Chihara (Tohoku Univ.)

The Initial Value Problem for Schrödinger Equations on the Torus

14:45–15:30 Shuji Machihara (Shimane Univ.)
Small Global Solutions for the Nonlinear Dirac Equation

15:45–17:00 Christopher D. Sogge (Johns Hopkins Univ.) Eigenfunctions and Harmonic Analysis

18:30- Banquet (at Co-Op Inn Kyoto) http://www2.univcoop.or.jp/inn Wednesday, July 10

9:30–10:15 Okihiro Sawada (Hokkaido Univ.) On Time-Local Solvability of the Navier-Stokes Equations in Besov Spaces

10:25–11:10 Yuko Enomoto (Waseda Univ.)  $L_p\text{-}L_q \text{ Estimates of the Oseen Semigroup in} \\ n\text{-}Dimensional Exterior Domain and its Application}$ 

11:20–12:05 Jihoon Lee (Seoul National Univ.) On the Subdissipative Navier-Stokes Equations