Preface

The 7th International ISAAC congress took place on the beautiful campus of Imperial College London during the period 13–18 July 2009. The congress was organized by the Department of Mathematics of Imperial College London with the generous support of the London Mathematical Society, the International Mathematical Union, the UK Engineering and Physics Research Council and the Imperial College Strategic Fund.

There have been 550 registered participants from 59 countries.

The ISAAC board acted as the scientific committee of the congress. The local organizing committee was composed by M. Ruzhansky (ICL), J. Wirth (ICL), D. Crisan (ICL), B. Davies (King's College London), J. Lamb (ICL), A. Laptev (ICL), B. Zegarlinski (ICL).

The program of the congress was a combination of plenary talks and special sessions. The 11 plenary talks were given by Sir J. Ball (Oxford), L. Boutet de Monvel (Paris), B. Davies (London), S. Donaldson (London), C. Kenig (Chicago), V. Kokilashvili (Tbilisi), N. Lerner (Paris), P. Malliavin (Paris), B.-W. Schulze (Potsdam), G. Uhlmann (Seattle), M. Yamamoto (Tokyo).

Among the 24 special sessions, the session

IV. 2. Partial Differential Equations, Dispersive Equations

was organized by F. Hirosawa (Yamaguchi) and M. Reissig (Freiberg).

This session was devoted to new approaches to dispersive equations and related topics, with the aim of combining ideas of scientists with also different specialization. Indeed, 27 lectures were given in this session: 15 of them were 45 minutes talks and the other 12 lectures were 30 minutes talks. All the lectures presented new remarkable results concerning linear and nonlinear hyperbolic equations, Schrödinger equations and parabolic equations. During the work of the session there were a lot of discussions between the participants, and several collaborations in new projects have been settled.

The lectures of Session IV.2 were presented by: Q-H. Choi (Incheon), F. Colombini (Pisa), M. D'Abbicco (Bari), D. Del Santo (Trieste), M.R. Ebert (São Paulo), D. Fang (Hangzhou), A. Galstyan (Edinburg, Texas), V. Georgiev (Pisa), M. Ghisi (Pisa), M. Gobbino (Pisa),

T. Herrmann (Freiberg), F. Hirosawa (Yamaguchi), T. Jung (Kunsan), L. Karp (Karmiel), H. Kubo (Tohoku), T. Matsuyama (Hiratsuka), K. Mochizuki (Tokyo), H. Nakazawa (Chiba), T. Nishitani (Osaka), R. Picard (Dresden), M. Pivetta (Trieste), M. Reissig (Freiberg), J. Saito (Tokyo), R. Suzuki (London and Tokyo), H. Uesaka (Tokyo), K. Yagdjian (Edinburg, Texas), B. Yordanov (Tennessee-Knoxville).

This volume of *Rendiconti dell'Istituto di Matematica dell'Università di Trieste* contains some contributions about recent research results which were presented in the 45 minutes talks.

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