

PREFACE

The symposium titled *Spectral and scattering theory and related topics* was held at the Research Institute for Mathematical Sciences of Kyoto University from December 14, 2011 through December 16, 2011. This symposium was organized to discuss recent progress and problems in mathematical physics, operator theory and analysis in which spectral theory of operators is the main object.

Though it was cold in Kyoto in this period, the symposium itself was very hot and we had 13 talks and more than 42 participants who were very keen to join the discussion. The contents of the talks were wide and not only analysis but also algebra and graph theory. We believe that these lectures will help the reader to discover interesting problems in mathematics and find ideas to solve his or her problems.

Though all the talks were interesting and exciting, it is very regretful that we could not persuade some speakers to contribute their talks to this proceedings. All manuscripts in this proceedings were carefully reviewed by anonymous referees chosen by the organizer.

We would like to thank not only speakers but also all participants who joined the discussions and referees who carefully reviewed manuscripts. Finally we would like to express our sincere thanks to RIMS for generous supports including financial ones.

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