## Preface

The Fourteenth MSJ International Research Institute "Asymptotic Analysis and Singularity" was held in Sendai, Japan on July 18-27, 2005, which was sponsored by the Mathematical Society of Japan and the Mathematical Institute, Tohoku University. This institute featured 4 expository lectures, 23 invited lectures and 77 contributed lectures. Those lectures ranged widely over a large number of topics including nonlinear partial differential equations, dynamical systems, calculus of variations and mathematical physics. The organizing committee consisted of H. Kozono, K. Tanaka, Y. Tsutsumi and E. Yanagida.

Sendai is one of the centers of nonlinear analysis in Japan as well as it is known as a historic city founded by Masamune Date, famous lord of about four hundred years ago. It was a great success that nearly two hundred researchers gathered in Sendai to exchange views on recent progress in their fields.

The organizing committee gratefully acknowledges financial support from the Kawai Fundation of Mathematical Science, the Commemorative Organization for the Japan World Exposition '70 and the Sendai Tourism & Convention Bureau. The organizing committee would also like to thank the staff and the students of Mathematical Institute, Tohoku University for helping to run this institute as long as two weeks. Especially, the organizing committee is grateful to Professors H. Chihara, S. Fujiie, K. Ishige, K. Horihata, I. Takagi and Ms. A. Konda for their tireless efforts toward the smooth organization and operation of the conference. The editorial committee is grateful to all contributors for their submission of original papers and to the referees for their efficient work. Furthermore, the editorial committee is indebted to Professor T. Sato for his help with the edit of the proceedings.

> Sendai, November 2006 Editorial Committee

All papers in this volume have been referred and are in final form. No version of any of them will be submitted for publication elsewhere.