

## Preface

This volume grew out from the 4th MSJ-SI international conference “NONLINEAR DYNAMICS IN PARTIAL DIFFERENTIAL EQUATIONS” held at Kyushu University, Kyushu, Japan, September 12th–21st, 2011 with more than two hundred participants. It consists of peer-reviewed articles which are survey and research papers by participants of the conference. In the conference, we focused on the nonlinear dynamics of solutions for PDEs arising in fields including dissipative systems, variational problems, pattern formation problems, viscosity solutions, dynamical systems, fluid dynamics, dispersive systems and wave equations. Please refer the attached program of the conference in the final section.

The purpose of the conference was to share not only the newest but also more familiar techniques and information in each field, and to enhance the collaboration between different fields. We believe that the conference has become a nice opportunity to search and develop new viewpoints, techniques and theories.

Finally, we would like to thank all the authors and the referees for their contributions to this volume.

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