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# **Springer Proceedings in Mathematics & Statistics**

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Michael Reissig · Michael Ruzhansky  
Editors

# Progress in Partial Differential Equations

Asymptotic Profiles, Regularity  
and Well-Posedness

 Springer

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# Preface

The present volume is a collection of papers devoted to several topics in the theory of evolution equations. It originates from lectures given at the session devoted to partial differential equations at the 8<sup>th</sup> ISAAC Congress held in the period 22–27 August 2011 at the Peoples' Friendship University in Moscow, Russia. At the same time, it also includes papers originating from the ISAAC (International Society for Analysis, its Applications and Computation) Special Interest Group in Partial Differential Equations.

The papers collected in this volume are authored by participants of that meeting and by members of the special interest group. They focus on different aspects of the current research and are, in particular, centred around

- hyperbolic partial differential equations,
- $p$ -evolution equations,
- boundary value problems,
- related optimisation problems,
- and non-linear aspects.

The aim of this volume is two-fold. On one hand it shall give an overview on a variety of problems in the field and, therefore, can serve as an introduction to some of the current research on different topics related to hyperbolic partial differential equations. On the other hand, all the papers are either full research papers presenting new results or surveys giving a broader overview of particular areas, thus also contributing to the advances in the area.

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