

PREFACE

In recent years, research activities in Italy concerning applied and industrial mathematics have been conducted by many scientists with different experience, from university, research institutions and industry. They addressed a number of specific subjects. Besides classical topics — such as fluid dynamics, elasticity, continuous mechanics — new problems have been considered, with application to a variety of situations and phenomena such as, for example, traffic modelling, hemodynamics, biofilms; moreover, a number of research projects of interest for the industry have also been developed.

The state-of-the-art of research in applied and industrial mathematics in Italy can be assessed from the large number of contributions presented at the IX Congress of Italian Society for Applied and Industrial Mathematics (SIMAI), held in Rome in September 2008. In this volume 50 papers are proposed, which were selected among all those presented at the Congress.

In order to properly select these papers from a large number of submitted contributions, the Editors of this volume were supported by the expertise of all members of SIMAI Scientific Committee: Ubaldo Barberis, Nicola Bellomo, Luca Formaggia, Giorgio Fotia, Alessandro Iafrati, Roberto Natalini, Mario Primicerio, Luigia Puccio and Alessandro Speranza. We would like to thank all of them, as well as all the referees involved in the selection procedure.

The Editors

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