



Christian Constanda
Bardo E. J. Bodmann
Paul J. Harris
Editors

Integral Methods in Science and Engineering

Applications in Theoretical
and Practical Research

 Birkhäuser

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Christian Constanda
Department of Mathematics
The University of Tulsa
Tulsa, OK, USA

Bardo E. J. Bodmann
Engineering School
Federal University of Rio Grande do Sul
Porto Alegre, Rio Grande do Sul, Brazil

Paul J. Harris
Department of Mathematics
University of Brighton
Brighton, UK

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Preface

The international conferences on Integral Methods in Science and Engineering (IMSE) started in 1985 at the University of Texas–Arlington, and continued biennially in a variety of venues around the world, bringing together specialists who employ integration techniques as essential tools in their research. These procedures exhibit generality, elegance, and efficiency, all of which are essential ingredients in the work of a wide category of practitioners.

The dates and venues of the first 15 IMSE conferences are listed below.

1985, 1990: University of Texas–Arlington, TX, USA

1993: Tohoku University, Sendai, Japan

1996: University of Oulu, Finland

1998: Michigan Technological University, Houghton, MI, USA

2000: Banff, AB, Canada (organized by the University of Alberta, Edmonton)

2002: University of Saint-Étienne, France

2004: University of Central Florida, Orlando, FL, USA

2006: Niagara Falls, ON, Canada (organized by the University of Waterloo)

2008: University of Cantabria, Santander, Spain

2010: University of Brighton, UK

2012: Bento Gonçalves, Brazil (organized by the Federal University of Rio Grande do Sul)

2014: Karlsruhe Institute of Technology, Germany

2016: University of Padova, Italy

2018: University of Brighton, UK

Due to the unfavorable world health conditions, the 2020 conference, scheduled to be held at the Steklov Mathematical Institute in St. Petersburg, Russia, had to be postponed. However, as an intermediate solution, a Symposium on the Theory and Applications of Integral Methods in Scientific Research was held online in July 2021. By making public their latest results, the participants in this event, all with long-standing IMSE credentials, have kept the flames of our common research interests burning bright, in anticipation of the more inclusive in-person meeting expected to take place, as planned, in St. Petersburg in the summer of 2022.

The peer-reviewed chapters of this volume, arranged alphabetically by first author's name, consist of 22 of the papers presented at the 2021 symposium. The editors would like to thank the reviewers for their help, Christopher Tominich at Birkhäuser–New York for his support of this project, and Saveetha Balasundaram and her production team for their courteous and professional handling of the publication process.

Tulsa, OK, USA
Porto Alegre, Brazil
Brighton, UK
January 2022

Christian Constanda
Bardo E. J. Bodmann
Paul J. Harris

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