

Preface

In the week of May 16–20, 2011, the workshop *Computational and Analytical Mathematics* (also known as *JonFest*) was held at the IRMACS Centre at Simon Fraser University in honour of Jonathan Michael Borwein’s 60th birthday. It brought together nearly 100 experts from 14 countries.

Jon Borwein is one of the most productive Canadian researchers ever. His research interests are broad, ranging from analysis, computational mathematics, and optimization to experimental mathematics and number theory. He has authored or co-authored more than a dozen books and more than 300 papers.

Those who have had the fortune of collaborating with him as students or colleagues will testify to his immense knowledge, technical mastery, and deep intuition. He has been altering the life trajectories of many of his collaborators significantly and sometimes dramatically. His passion and relentless pursuit for useful and beautiful mathematics are extraordinary; the way he inspires and brings out the best in his students and collaborators is Steve Jobs-like!

This book brings together 31 carefully refereed research and review papers in the broad areas of Jon Borwein’s interests. Most papers in this volume grew out of talks delivered at JonFest; however, some contributions are from experts who were unable to attend. Very sadly, one of the contributors, Richard Crandall, passed away in December 2012, before this book went into production.

We believe that the reader will find this book to be a delightful and valuable state-of-the-art account on some fascinating areas of Computational and Analytical Mathematics, ranging from Cantor fractals and strongly normal numbers to various algorithms in optimization and fixed point theory.

The editors thank the sponsors of JonFest—Interdisciplinary Research in the Mathematical and Computational Sciences (IRMACS) Centre at Simon Fraser University (SFU), Australian Mathematical Sciences Institute (AMSI), Mathematics of Information Technology and Complex Systems (MITACS), Pacific Institute for the Mathematical Sciences (PIMS), Fields Institute, and the Priority Research Centre for Computer-Assisted Research Mathematics and its Applications (CARMA)—for their financial and logistical support in hosting the workshop, and Pam Borghard

and Veselin Jungic for their “on-site” help in the preparation and realization of the workshop at the IRMACS Centre.

We are very grateful to Dr. Hung Phan for his hard work and great help in the preparation of this volume which as a result not only is beautifully typeset but also exhibits a consistent structure. We also thank Ms. Elizabeth Loew from Springer for her help guiding this volume through production.

Finally, we thank the hardworking and dedicated referees who contributed crucially to the quality of this volume through their constructive and insightful reviews.

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Computational and Analytical Mathematics

In Honor of Jonathan Borwein's 60th Birthday

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