

**Sampling Theory in Signal and Image Processing**  
**Special Issue on Harmonic Analysis and Inverse Problems**

Preface

The second Mathematical Congress of the Americas took place in Montreal, Canada on July 24 - 27, 2017. With 82 scientific sessions and numerous plenary and prize lectures, the MCA-2017 achieved its *goals*, which were to highlight the excellence of mathematical achievements in the continent and to foster collaboration between the continents' mathematical communities.

The editors of this volume had the privilege to run two scientific sessions: 'Harmonic Analysis and Inverse Problems' (15 lectures) and 'Computational Inverse Problems: From Multiscale Modeling to Uncertainty Quantification' (13 lectures). Several aspects of harmonic analysis and its applications in domains like signal processing and inverse problems were discussed in detail in both scientific sessions.

The current volume is the outcome of further collaborations in support of the founding goals of the MCA-2017. The editors hope that these collaborations will continue and will create further fruitful interactions between mathematicians and researchers in other disciplines.

Guest Editors:

Akram Aldroubi	– Vanderbilt University
Luz Angélica Caudillo-Mata	– University of British Columbia
Julianne Chung	– Virginia Tech
Pedro González Casanova	– National Autonomous University of Mexico
Javad Mashreghi	– Université Laval