



## Editors' foreword for the special issue "Real Analysis and Its Applications"

Udayan B. Darji<sup>1</sup> · Tomasz Natkaniec<sup>2</sup> · Valentin A. Skvortsov<sup>3</sup>

Published online: 6 February 2019  
© Springer Nature Switzerland AG 2019

This volume contains selected papers on Real Analysis and related topics. We would like to dedicate this collection to Professor Zbigniew Grande on the occasion of his 70th birthday. Prof. Grande is a renowned Polish specialist in the Real Functions Theory, a supervisor of seven doctorates, author or co-author of over 160 scientific articles on a wide range of topics on real functions like:

- sup-measurable functions,
- measurability of functions of two variables vs. measurability of their sections,
- sets of continuity and semicontinuity points,
- generalizations of continuity like: derivatives, approximately continuous functions, (approximately) cliquish and (approximately) quasi-continuous functions, almost continuity in the sense of Stallings,
- algebraic structures generated by families of functions: groups, algebras, Baire systems, lattices.

Research initiated by Prof. Grande exerted great influence on the development of the Real Functions Theory, and its continuation can also be found in some articles of this issue.

This collection is a spin-off from the *International Spring Conference on Real Analysis and Its Applications* which took place at the Ostromecko Palace, in the vicinity of Bydgoszcz, Poland, on May 29–June 1, 2017.

---

✉ Tomasz Natkaniec  
mattn@mat.ug.edu.pl

Udayan B. Darji  
ubdarj01@louisville.edu

Valentin A. Skvortsov  
vaskvor2000@yahoo.com

<sup>1</sup> Department of Mathematics, University of Louisville, Louisville, KY 40292, USA

<sup>2</sup> Institute of Mathematics, University of Gdańsk, 80-308 Gdańsk, Poland

<sup>3</sup> Faculty of Mechanics and Mathematics, Moscow State University, Moscow, Russia 119991