Preface

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The journal *Set-Valued and Variational Analysis* dedicated two issues to the life and work of Jonathan Michael Borwein who passed away suddenly in August 2016. We refer the reader to the first issue for some of our reflections on Jon Borwein’s life and legacy. The contents of this second issue in his memory can be summarized as follows.

In “A remark on the convergence of the Douglas–Rachford iteration in a nonconvex setting”, Ohad Giladi obtains a convergence result for the Douglas–Rachford algorithm for finding a point in the intersection of a sphere and a line.

A careful analysis of a proximal-gradient dynamical system is carried out in the paper “Approaching nonsmooth nonconvex optimization problems through first order dynamical systems with hidden acceleration and Hessian driven damping terms” by Radu Ioan Boţ and Enő Robert Csetnek.

Patrick Combettes provides a comprehensive study of “Perspective functions: properties, constructions, and examples”.

A general linear ill-posed equation is studied from the viewpoint of duality in the paper “A note on the Morozov principle via Lagrange duality” by Xavier Bonnefond, Pierre Maréchal, and Walter Cedric Simo Tao Lee.

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Francisco Aragón Artacho and Rubén Campoy consider nonconvex feasibility problems of a combinatorial type in their paper “Solving graph coloring problems with the Douglas–Rachford algorithm”.

A new class of nonsmooth convex functions, termed sums-of-squares-convex semialgebraic functions, is introduced in the paper “SOS-convex semialgebraic functions and applications to robust optimization” by N.H. Chieu, J.W. Feng, W. Gao, G. Li, and D. Wu.

A.V. Arutyunov and A.F. Izmailov present a novel covering theorem for a nonlinear mapping on a convex cone, under assumptions less restrictive than the classical Robinson’s regularity condition, in their paper “Stability of possibly nonisolated solutions of constrained equations, with applications to complementarity and equilibrium problems”.

A class of monotone operators suitable for symbolic representation and manipulation in a computer algebra system is investigated in the paper “Symbolic computation with monotone operators” by Florian Lauster, Russell Luke, and Matthew Tam.

In their paper “On Bregman-type distances for convex functions and maximally monotone operators”, Regina Burachik and Juan Martínez-Legaz use monotone operators to analyze a generalization of the classical Bregman distance.

A stunningly beautiful analysis of the “Dynamics of the Douglas–Rachford algorithm for ellipses and p -spheres” is one of the last projects of Jonathan Borwein, with Scott Lindstrom, Brailey Sims, Anna Schneider, and Matthew Skerritt as co-authors.

In the paper “Non-smooth optimization for robust control of infinite-dimensional systems”, Pierre Apkarian, Dominikus Noll, and Laleh Ravanbod employ a computationally attractive non-smooth trust region method for solving a control problem.

Finally, we are very grateful to the authors and referees for their valuable contributions and careful work to this two-issue volume in memoriam of our dear colleague and friend Jonathan Borwein.

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