SET OPTIMIZATION MEETS FINANCE.

International Conference on
Set-Valued Variational Analysis and Optimization with Applications in Finance

September 8–12, 2014, Bruneck-Brunico, Italy

Conference Program

Monday, September 8th, 2014

- 2-4pm Tutorial: *Set-valued models in finance* (Z. Feinstein/B. Rudloff)

- 4-4:30 Coffee break

- 4:30-6:30 Tutorial: *Computational issues in set optimization* (A. Löhne/B. Weißing)

- 8:00pm: Welcome reception at

  Ragenhaus Bruneck

  with vernissage "Geometry in Fire" (sponsored by Stadtmarketing Bruneck, Stadtmuseum Bruneck, UNIBZ)

Tuesday, September 9th, 2014

- 9:00 Opening ceremony (with President of UNIBZ Prof. Bergmeister, Dean Prof. Courteau, Program Director Prof. Maurer)

- 9:30-10:15 Keynote by R. T. Rockafellar: *Risk measures and utility: linkage and extensions*

- 10:15 - 10:45 Coffee break

- 10:45-11:15 D. Kuroiwa: *Robust vector optimization by set optimization*

- 11:20-11:50 M. Rocca: *Quasiconvexity of set-valued maps assures well-posedness of robust vector optimization*

- 11:55-12:25 R. Strugariu: *On set-valued optimization problems with variable ordering structure*

- 12:25-2:30 Lunch break

- 2:30-3:15 Special guest P. Koch-Medina: *Risk measures with respect to multiple eligible assets*

- 3:20-3:50 C.-A. Munari (young researcher): *Risk measures with respect to multiple eligible assets (II)*

- 3:50-4:20 Coffee break

- 4:20-4:50 L. Csirmaz: *Optimal solutions of an optimization problem defined by an oracle*

- 4:55-5:25 M. Ehrgott: *From set optimization to data envelopment analysis - A tale of sets, extreme points, hyperplanes, and money*

- 5:30-6:00 F. Bökler (young researcher): *Running time analyses of Benson type algorithms with an application to multiobjective combinatorial optimization problems*

Time for dinner, night off.

Wednesday, September 10th, 2014

- 8:30-9:15 Keynote by I. Molchanov: *Set-valued portfolios and set-valued risks*

- 9:20-9:50 C. Zalinescu: *Series of convex functions in locally convex spaces: subdifferential, conjugate and applications*

- 9:50-10:20 Coffee break

- 10:20-10:50 A. Roux: *Hedging and optimal exercise of American options with gradual exercise under transaction costs*

- 10:55-11:25 F. Heyde: *Geometric duality for convex vector optimization problems*

- 11:30-12:00 F. Ulus (young researcher): *Parametric simplex algorithm for linear vector optimization problems*

12-1 Time for lunch
1-7pm Hiking tours (Kronplatz, two different tours)

Thursday, September 11th, 2014

- 9:00-9:45 Keynote by G. Crespi: *Refreshing variational inequalities in set optimization*

- 9:50-10:20 C. Schrage: *A Weierstrass extreme value theorem in set optimization*

- 10:20-10:50 Coffee break

- 10:50-11:20 M. Pilecka (young researcher): *Optimality conditions in set-valued programming*

- 11:25-11:55 M. Studniarski: *Necessary and sufficient conditions for a Pareto optimal allocation in a discontinuous Gale economic model*

- 12:00-12:30 G. Panda: *Bounds of performance measure of a portfolio optimization model with set-valued parameters*

- 12:30-2:30 Lunch break

- 2:30-3:15 M. Karliczek (young researcher): *Elements of L^0-module theory*

- 3:20-3:50 S. Cerreia-Vioglio, *Hilbert A-Modules*

- 3:50-4:20 Coffee break

- 4:20-4:50 C. Ararat (young researcher): *A characterization theorem for Aumann integrals using the complete lattice approach*

- 4:55-5:25 Z. Feinstein (young researcher): *A set-valued Bellman's principle*

7:00 Departure for Conference Dinner (bus transfer to Amaten)
approx. 10:30-11pm bus back from Amaten

Friday, September 12th, 2014

- 9:00-9:45 Keynote by T. Pennanen: *Optimal investment and contingent claim valuation in illiquid markets*

- 9:50-10:20 N. Popovici: *On certain classes of generalized convex set-valued functions*

- 10:20-10:35 Award session

- 10:35-11:05 Coffee break

- 11:05-11:50 Special guest B. Mordukhovich: *Applications of set optimization to behavioral sciences*

- 11:55-12:25 I. Sadeqi: *Lipschitz continuity of an approximate solution mapping for set-valued vector equilibrium*

- 12:30-1:00 B. Rudloff: *Set-valued measures of multivariate and systemic risk*

- 1:00-1:05 Closing remarks