METU | INSTITUTE OF APPLIED MATHEMATICS

MONTHLY BULLETIN

AUGUST 2017

Contents

1 Journal Articles

- E. Kropat, S. Meyer-Nieberg and G.-W. Weber, *Bridging the Gap Between Variational Homogenization Results and Two-Scale Asymptotic Averaging Techniques on Periodic Network Structures–On a Rigorous Derivation of Non-Variational Macroscopic Models*, Numerical Algebra, Control and Optimization 7(3), 223–250, 2017, DOI:10.1007/s12351-016-0229-x.

2 Editorial

- K. Akartunalı, M. Laumanns and G.-W. Weber, *Effects of Uncertainty Phenomena to Desirability Functions*, Optimization, Special Issue: Making an Impact with Optimization, on the occasion of the 27th European Conference on Operational Research, EURO XXVII, 2017.

3 Accepted Publications

- Y. Coşkun, A. S. Selçuk–Kestel and B. Yılmaz, *Diversification Benefit and Return Performance of REITs Using CAPM and Fama–French: Evidence from Turkey*, Borsa Istanbul Review, 2017, DOI: 10.1016/j.bir.2017.08.003.
- K. Yıldırak, O. Evkaya and A. S. Selçuk–Kestel, *Assessment of Index–based Drought Insurance*, Ekonomik Yaklaşım, 2017.
- K. D. Unlu and A. S. Selçuk–Kestel, *Determination of Causality in Carbon Emission with respect to Economic Growth and Education*, Gazi University Journal of Science, 2017.
- B. Z. Temoçin, R. Korn and A. S. Selçuk–Kestel, *Constant Proportion Portfolio Insurance in Defined Contribution Pension Plan Management under Discrete–Time Trading*, Annals of Operations Research, 2017.
- E. Savku and G.-W. Weber, *A Stochastic Maximum Principle for a Markov Regime–Switching Jump–Diffusion Model with Delay and an Application to Finance*, Journal of Optimization Theory and Applications, 2017, DOI: 10.1007/s10957-017-1159-3.
- Ö. N. Onak, Y. Serinağaoğlu and G.-W. Weber, *Effects of A Priori Parameter Selectiom in Minimum Relative Entropy Method on the Inverse Electrocardiography Problem Solutions*, Inverse Problems in Science and Engineering, 2017, DOI: 10.1080/17415977.2017.1369979.
- B. Aktepe–Öztürk, G.-W. Weber and G. Köksal, *Effects of Uncertainty Phenomena to Desirability Functions*, Optimization, Special Issue: Making an Impact with Optimization, on the occasion of the 27th European Conference on Operational Research, EURO XXVII, 2017, DOI: 10.1080/02331934.2017.1371167.
- G.-W. Weber and E. Savku, *Foreword of the Book Renewable Energy and Electric Resources for Sustainable Rural Development*, IGI Global, Hershey PA, USA, 2017.
- T. R. Bielecki, M. Jeanblanc and A. D. Sezer, *Joint Densities of Hitting Times for Finite State Markov Processes*, Turkish Journal of Mathematics, 2017.

4 Thesis

- Emel Savku, *Advances in Optimal Control of Markov Regime-Switching Models with Applications in Finance and Economics*, PhD Thesis in Financial Mathematics, Advisor: Gerhard Wilhelm Weber, 18.08.2017.

5 Conference Participation & Presentation

- A. D. Sezer, T. Kruse and A. Popier, *Backward Stochastic Differential Equations with Nonmarkovian Singular Terminal Values*, Stochastic Processes–Actuarial Science and Finance, Hanoi, Vietnam, July 31–August 3, 2017.

- A. D. Sezer and B. Legros, *rM/G/1 Queue: Remaining Service Time Dependent Arrivals and iid Service Times*, Stochastic Processes–Actuarial Science and Finance, Hanoi, Vietnam, July 31–August 3, 2017.

- B. Kalaycı, A. Özmen, A. Karimov and G.-W. Weber, *Identification of Coupled Systems of Stochastic Differential Equations in Finance Including Investor Sentiment by Multivariate Adaptive Regression Splines (MARS)*, 4th International Conference on Operational Research, Medan, Indonesia, August 21–23, 2017.

- G.-W. Weber, E. Savku, A. Kerimov, N.S. Aydin, Y. Yolcu–Okur and E. Akdogan, *Stochastic Optimal Control Under Impulsive, Regime Switching and Paradigm Shifting Environments in Economics and Finance*, International Conference on Information and Communication Technologies, Medan, Indonesia, August 25–27, 2017.

- G.-W. Weber, *In Gratitude and Love to late Professor Miroljub "Miro" Kljajic*, International Institute for Advanced Studies in Systems Research and Cybernetics, Baden-Baden, Germany, July 31–August 4, 2017.