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Monthly Bulletin

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1 Editorial

- Vasant, P.; Zelinka, I.; Weber, G.–W., *Intelligent Computing & Optimization*, in: Advances in Intelligent Systems and Computing, Springer, ISBN 978-3-030-00979-3, DOI 10.1007/978-3-030-00979-3, 2019

2 Conference Proceedings (Refereed) Published

- Üçüncü D.; Akyüz S.; Gül E., Weber G.-W., *Optimality Conditions for Sparse Quadratic Optimization Problems*, in: EngOpt 2018 Proceedings of the 6th International Conference on Engineering Optimization, 766-777, 2018 DOI:10.1007/978-3-319-97773-7_67

3 Accepted Publications

- Akat, F.; Selcuk-Kestel, A.S.; Tank, F., *The Estimation of Adopted Mortality and Morbidity Rates Using Markov Model and the Phase Type Law: the Turkish Case*, Communications in Statistics–Simulation and Computation, 2018,
DOI: 10.1080/03610918.2018.1478098

- Oflaz, Z.; Yozgatligil, C.; Selcuk-Kestel, A.S., *Aggregate Claim Estimation using bivariate Hidden Markov Model*, ASTIN Bulletin, 2018, DOI:10.1017/asb.2018.29

- Evcin, C.; Uğur, Ö.; Tezer–Sezgin, M., *Controlling the Power Law Fluid Flow and Heat Transfer Under the External Magnetic Field Using the Flow Index and the Hartmann Number*, International Journal of Computational Methods, 2018, DOI:10.1142/S0219876218501438

- Deelstra, G.; Kozpınar, S; Simon, M., *Spread and Basket Option Pricing in a Markov–Modulated Lévy Framework with Synchronous Jumps*, Applied Stochastic Models in Business and Industry, 2018, DOI: 10.1002/asmb.2385

4 Thesis

- Mehmet Alp Üreten, *Numerical Studies of Korteweg-De Vries Equation with Random Input Data*, MSc in Scientific Computing, Advisor: Hamdullah Yücel, Co–Advisor: Ömür Uğur, September 3, 2018.

- Sinem Kozpınar, *Pricing Spread and Basket Options under Markov–Modulated Models*, PhD in Financial Mathematics, Advisor: Ömür Uğur, Co–Advisor: Zehra Ekşi-Altay, September 3, 2018.

- Cansu Evcin, *Optimal Control in Fluid Flow Problems with Proper Orthogonal Decomposition (POD) Applications to Finite Element Method (FEM) Solutions*, PhD in Scientific Computing, Advisor: Ömür Uğur, September 3, 2018.

- Abdulwahab Adinoyu Animoku, *Uncertainty Quantification of Parameters in Local Volatiliy Model Via Frequentist, Bayesgn and Stochastic Galerkin Methods*, PhD in Financial Mathematics, Advisor: Ömür Uğur, September 4, 2018.

- Fatma Başoğlu Kabran, *Exit Probabilities of Markov Modulated Constrained Random Walk*, PhD in Financial Mathematics, Advisor: Ali Devin Sezer, September 5, 2018.

- Kamil Demirberk Ünlü, *Exit Probabilities of Constrained Simple Random Walks*, PhD in Financial Mathematics, Advisor: Ali Devin Sezer, September 5, 2018.

- Özgür Özel, *Modelling Interest Rates Moving in a Band*, PhD in Financial Mathematics, Advisor: Azize Hayfavi, September 6, 2018.

- Önder Nazım Onak, *Adaptive Multivariate Solution Schemes for Inverse Ecg Problem*, PhD in Scientific Computing, Advisor: Yeşim Serinağaoğlu Doğrusöz, Co–Advisor: Gerhard W. Weber, September 6, 2018.

- Merve Öğünç, *Differential Cryptanalysis of Lblock Using Differential Factors*, MSc in Cryptography, Advisor: Ali Doğanaksoy, September 7, 2018.

- Çiğdem Yerli, *Portfolio Risk Diversification Under Uncorrelated Risks*, MSc in Financial Mathematics, Advisor: A. Sevtap Selçuk–Kestel, Co–advisor: Nilüfer Schindler, September 7, 2018.

5 Conference Participation & Presentation

- **Mert, Ö. M.**; Selcuk-Kestel A. S., *Optimal Stop–Loss Reinsurance: A Dependence Analysis of Aggregate Claims under Certain Distributions*, European Actuarial Journal Conference 2018, September 09-11, 2018, Leuven, Belgium.
- **Yılmaz, B.**; Selcuk-Kestel A. S., *Default and Prepayment Risk Management Using Option Based Mortgage Contract Pricing Method*, European Actuarial Journal Conference 2018, September 09-11, 2018, Leuven, Belgium.
- **Yıldırım Külekci, B.**; Selcuk-Kestel A. S.; Karabey, U., *Multivariate Extreme Value Theory on the Valuation of Tail Behavior in Actuarial Risks*, European Actuarial Journal Conference 2018, September 09-11, 2018, Leuven, Belgium.
- **Yücel, H.**, *Goal–Oriented A Posteriori Error Estimation For Dirichlet Boundary Control Problems*, 5th European Conference on Computational Optimization (EUCCO 2018), September 10–12, 2018, Trier, Germany.
- **Çiloğlu, P.**; Yücel, H., *Unsteady Convection Diffusion Equation with Random Input Data*, Chemnitz Finite Element Symposium 2018, September 24–26, 2018, Chemnitz, Germany.
- **Onak, O. N.**; Serinagaoglu–Dogrusoz, Y.; Weber, G.-W., *Robustness of Reduced Order Non–Parametric Model for Inverse ECG Solution Against the Modelling and Measurement Noise*, Computing in Cardiology, September 23–26, 2018, Maastricht, Nederlands.
- **Hanoymak, T.**; Bektaş A., *On Mathematical Aspects of Blockchain Architecture*, International Conference on Pure and Applied Mathematics (ICPAM-VAN 2018), September 11–13, 2018, Van, Turkey.