

Publications for Marek Rutkowski

2018

Bielecki, T., Cialenco, I., Rutkowski, M. (2018). Arbitrage-free pricing of derivatives in nonlinear market models. *Probability, Uncertainty and Quantitative Risk*, 3(1), 1-56. [More Information]

Nie, T., Rutkowski, M. (2018). Fair bilateral pricing under funding costs and exogenous collateralization. *Mathematical Finance*, 28(2), 621-655. [More Information]

2017

Guo, I., Rutkowski, M. (2017). Arbitrage-free pricing of multi-person game claims in discrete time. *Finance and Stochastics*, 21(1), 111-155. [More Information]

Brigo, A., Buescu, C., Rutkowski, M. (2017). Funding, repo and credit inclusive valuation as modified option pricing. *Operations Research Letters*, 45(6), 665-670. [More Information]

2016

Nie, T., Rutkowski, M. (2016). A BSDE approach to fair bilateral pricing under endogenous collateralization. *Finance and Stochastics*, 20(4), 855-900. [More Information]

Tarca, S., Rutkowski, M. (2016). Assessing the Basel II internal ratings-based approach: Empirical evidence from Australia. *Journal of Financial Regulation and Compliance*, 24(2), 106-139. [More Information]

Nie, T., Rutkowski, M. (2016). BSDEs driven by multidimensional martingales and their applications to markets with funding costs. *Theory of Probability and Its Applications*, 60(4), 604-630. [More Information]

Guo, I., Rutkowski, M. (2016). Discrete time stochastic multi-player competitive games with affine payoffs. *Stochastic Processes and their Applications*, 126, 1-32. [More Information]

Ahlip, R., Rutkowski, M. (2016). Pricing of foreign exchange options under the MPT stochastic volatility model and the CIR interest rates. *European Journal of Finance*, 22(7), 551-571. [More Information]

2015

Nie, T., Rutkowski, M. (2015). Fair bilateral prices in Bergman's model with exogenous collateralization. *International Journal of Theoretical and Applied Finance*, 18(7), 1550048 - 1-1550048 - 26. [More Information]

Rutkowski, M., Tarca, S. (2015). Regulatory capital modeling for credit risk. *International Journal of Theoretical and Applied Finance*, 18(5), 1550034-1-1550034-44. [More Information]

Ahlip, R., Rutkowski, M. (2015). Semi-analytical Pricing of Currency Options in the Heston/CIR Jump- Diffusion Hybrid Model. *Applied Mathematical Finance*, 22(1), 1-27. [More Information]

Bielecki, T., Rutkowski, M. (2015). Valuation and Hedging of Contracts with Funding Costs and Collateralization. *SIAM Journal on Financial Mathematics*, 6(1), 594-655. [More Information]

2014

Li, L., Rutkowski, M. (2014). Admissibility of generic market models of forward swap rates. *Mathematical Finance*, 24(4), 728-761. [More Information]

Guo, I., Rutkowski, M. (2014). Discrete-Time Multi-Player Stopping and Quitting Games with Redistribution of Payoffs. In Caroline Hillairet, Monique Jeanblanc, Ying Jiao (Eds.), *Arbitrage, Credit and Informational Risks*, (pp. 171-206). Singapore: World Scientific Publishing. [More Information]

Ahlip, R., Rutkowski, M. (2014). Forward Start Foreign Exchange Options Under Heston's Volatility and the CIR Interest Rates. In Yuri Kabanov, Marek Rutkowski, Thaleia Zariphopoulou (Eds.), *Inspired by Finance: The Musiela Festschrift*, (pp. 1-27). Cham: Springer. [More Information]

Nie, T., Rutkowski, M. (2014). Multi-player stopping games with redistribution of payoffs and BSDEs with oblique reflection. *Stochastic Processes and their Applications*, 124(8), 2672-2698. [More Information]

Li, L., Rutkowski, M. (2014). Progressive Enlargements of Filtrations with Pseudo-Honest Times. *Annals of Applied Probability*, 24(4), 1509-1553. [More Information]

2013

Durand, C., Rutkowski, M. (2013). CVA under alternative settlement conventions and with systemic risk. *International Journal of Theoretical and Applied Finance*, 16(7), 1-40. [More Information]

Ahlip, R., Rutkowski, M. (2013). Pricing of foreign exchange options under the Heston stochastic volatility model and CIR interest rates. *Quantitative Finance*, 13(6), 955-966. [More Information]

Information]

2012

Guo, I., Rutkowski, M. (2012). A zero-sum competitive multi-player game. *Demonstratio Mathematica*, 45(2), 415-433. [More Information]

Li, L., Rutkowski, M. (2012). Random times and multiplicative systems. *Stochastic Processes and their Applications*, 122(5), 2053-2077. [More Information]

2011

Bielecki, T., Crepey, S., Jeanblanc, M., Rutkowski, M. (2011). Convertible Bonds in a Defaultable Diffusion Model. *Progress in Probability*, 65, 255-298. [More Information]

Bielecki, T., Jeanblanc, M., Rutkowski, M. (2011). Hedging of a credit default swaption in the CIR default intensity model. *Finance and Stochastics*, 15(3), 541-572. [More Information]

Li, L., Rutkowski, M. (2011). Market Models of Forward CDS Spreads. *Progress in Probability*, 65, 361-411. [More Information]

Rutkowski, M. (2011). Options on Credit Default Swaps and Credit Default Indexes. In Tomasz R Bielecki, Damiano Brigo, Frederic Patras (Eds.), *Credit Risk Frontiers: Subprime Crisis, Pricing and Hedging, CVA, MBS, Ratings, and Liquidity*, (pp. 219-279). New Jersey, USA: John Wiley & Sons. [More Information]

2010

Gapeev, P., Jeanblanc, M., Li, L., Rutkowski, M. (2010). Constructing Random Times with Given Survival Processes and Applications to Valuation of Credit Derivatives. In Carl Chiarella and Alexander Novikov (Eds.), *Contemporary Quantitative Finance: Essays in Honour of Eckhard Platen*, (pp. 255-280). Germany: Springer. [More Information]

Musiela, M., Rutkowski, M. (2010). *Martingale Methods in Financial Modelling*. Germany: Springer.

Baldeaux, J., Rutkowski, M. (2010). Static Replication of Forward-Start Claims and Realized Variance Swaps. *Applied Mathematical Finance*, 17(2), 99-131. [More Information]

2009

Bielecki, T., Jeanblanc, M., Rutkowski, M. (2009). Alternative approaches to credit risk modelling. In Hermann (Eds.), *Modèles aléatoires en finance mathématiques*, (pp. 1-159). France: CIMPA.

Bielecki, T., Jeanblanc, M., Rutkowski, M. (2009). *Credit Risk Modeling*. Osaka, Japan: Osaka University Press.

Bielecki, T., Crepey, S., Jeanblanc, M., Rutkowski, M. (2009). Defaultable Game Options in a Hazard Process Model. *Journal of Applied Mathematics and Stochastic Analysis*, 2009, 1-33. [More Information]

Information]

Bielecki, T., Crepey, S., Jeanblanc, M., Rutkowski, M. (2009). Defaultable game options in a hazard process model. *Journal of Applied Mathematics and Stochastic Analysis*, 2009, 1-33. [More Information]

Ahlip, R., Rutkowski, M. (2009). Forward start options under stochastic volatility and stochastic interest rates. *International Journal of Theoretical and Applied Finance*, 12(2), 209-225. [More Information]

Roper, M., Rutkowski, M. (2009). On the relationship between the call price surface and the implied volatility surface close to expiry. *International Journal of Theoretical and Applied Finance*, 12(4), 427-441. [More Information]

Rutkowski, M., Armstrong, A. (2009). Valuation of credit default swaptions and credit default index swaptions. *International Journal of Theoretical and Applied Finance*, 12(7), 1027-1053. [More Information]

2008

Bielecki, T., Crepey, S., Jeanblanc, M., Rutkowski, M. (2008). Arbitrage pricing of defaultable game options with applications to convertible bonds. *Quantitative Finance*, 8(8), 795-810. [More Information]

Bielecki, T., Crepey, S., Jeanblanc, M., Rutkowski, M. (2008). Defaultable options in a markovian intensity model of credit risk. *Mathematical Finance*, 18(4), 493-518. [More Information]

Bielecki, T., Jeanblanc, M., Rutkowski, M. (2008). Pricing and trading credit default swaps in a hazard process model. *Annals of Applied Probability*, 18(6), 2495-2529. [More Information]

Bielecki, T., Crepey, S., Jeanblanc, M., Rutkowski, M. (2008). Valuation of Basket Credit Derivatives in the Credit Migrations Environment. In John R Birge, Vadim Linetsky (Eds.), *Handbooks in Operations Research and Management Science: Financial Engineering*, (pp. 471-507). Amsterdam: Elsevier.

2007

Rutkowski, M., Yu, N. (2007). AN EXTENSION OF THE BRODY-HUGHSTON-MACRINA APPROACH TO MODELING OF DEFAULTABLE BONDS. *International Journal of Theoretical and Applied Finance*, 10(3), 557-589. [More Information]

Bielecki, T., Jeanblanc, M., Rutkowski, M. (2007). Hedging of basket credit derivatives in credit default swap market. *Journal of Credit Risk*, 344(1), 91-132.

Rutkowski, M., Yousiph, K. (2007). Pde approach to the valuation and hedging of basket credit derivatives. *International Journal of Theoretical and Applied Finance*.

2006

Bielecki, T., Crepey, S., Jeanblanc, M., Rutkowski, M. (2006).

Arbitrage pricing of convertible securities with credit risk. *45th IEEE Conference on Decision and Control 2006*.

Bielecki, T., Jeanblanc, M., Rutkowski, M. (2006). Completeness of a general semimartingale market under constrained trading. In Shiryayev, A.N.; Grossinho, M.d.R.; Oliveira, P.E.; Esqu vel, M.L (Eds.), *Stochastic Finance*, (pp. 83-106). USA: Springer. [More Information]

Bielecki, T., Jeanblanc, M., Rutkowski, M. (2006). Hedging of credit derivatives in models with totally unexpected default. In J Akahori et al (Eds.), *Stochastic Processes and Applications to Mathematical Finance. Proceedings of the 5th Ritsumeikan International Symposium*, (pp. 35-100). Singapore: World Scientific Publishing.

Bielecki, T., Jeanblanc, M., Rutkowski, M. (2006). Replication of Contingent Claims in a Reduced-Form Credit Risk Model with Discontinuous Asset Prices. *Stochastic Models*, 22(4), 667-687. [More Information]

2005

Bielecki, T., Jeanblanc, M., Rutkowski, M. (2005). PDE approach to valuation and hedging of credit derivatives. *Quantitative Finance*, 5(3), 257-270. [More Information]

2004

Bielecki, T., Rutkowski, M. (2004). Modeling of the defaultable term structure: conditionally Markov approach. *IEEE Transactions on Automatic Control*, 49(3), 361-373. [More Information]