Recent significant publications (2004 onwards) - Gareth W. Peters

Summary:

- Scholarly Research Books Author = 2
- Scholarly Research Books Editor = 3
 - Scholarly Book Chapters = 11
- Journal Papers (peer reviewed) Appeared = 102
- Conference Papers (peer reviewed) in Proceedings = 41
 - Preprints Journal Papers (submitted) = 17
 - Scholarly Books In Preparation = 3

Note: all references are in Harvard style citation format.

Scholarly books (peer reviewed)

Note: The authored books were peer reviewed at both the proposal level and then again on a 50%+ portion of the content during the book development. Then an external copyediting review was performed twice as well as an industry review (outside of academia). The edited books (all chapters) were blind peer reviewed as per usual journal academic standards.

- 1. Cruz, M.G., **Peters, G.W**. and Shevchenko, P.V., 2015. *Fundamental aspects of operational risk and insurance analytics: A handbook of operational risk.* John Wiley & Sons.
- 2. Peters, G.W. and Shevchenko, P.V., 2015. Advances in heavy tailed risk modeling: A handbook of operational risk. John Wiley & Sons.
- 3. Dick, J., Kuo, F.Y., **Peters, G.W.** and Sloan, I.H. editors., 2013. *Monte Carlo and Quasi-Monte Carlo Methods 2012*. Springer Proceedings in Mathematics & Statistics, vol 65. New York: Springer.
- 4. **Peters G.W.** and Matsui, T. editors., 2015. *Theoretical Aspects of Spatial-Temporal Modeling*. SpringerBriefs in Statistics, Springer Tokyo.
- 5. **Peters G.W.** and Matsui, T. editors., 2015. *Modern Methodology and Applications in Spatial-Temporal Modeling*. SpringerBriefs in Statistics, Springer Tokyo.

Scholarly book chapters (peer reviewed)

Note: The authored book chapters were invited, however they were all subject to standard scientific review process as would be the case for a journal paper.

- 6. **Peters, G.W.,** Korostil, I.A. and Regan, D.G., 2013. HPV Modelling Goes Bayesian: Inference via Advanced Markov Chain Monte Carlo Methods. In *Human Papilloma virus: Prevalence, Detection and Management*, Nova Science Publishers Chapter 17, pp. 453-526.
- Del Moral, P., Peters, G.W. and Vergé, C., 2013. An introduction to stochastic particle integration methods: with applications to risk and insurance. In *Monte Carlo and Quasi-Monte Carlo Methods* 2012 (pp. 39-81) Dick J., Kuo F., Peters G.W., Sloan I. (eds) Springer Proceedings in Mathematics & Statistics, vol 65. Springer, Berlin, Heidelberg.
- 8. Septier, F. and **Peters, G.W.,** 2015. An overview of recent advances in Monte-Carlo methods for Bayesian filtering in high-dimensional spaces. In: Peters G., Matsui T. (eds) *Theoretical Aspects of Spatial-Temporal Modeling*. SpringerBriefs in Statistics (pp. 31-61). Springer, Tokyo.

- Azzaoui, N., Clavier, L., Guillin, A. and Peters, G.W., 2015. Spectral Measures of alpha-Stable Distributions: An Overview and Natural Applications in Wireless Communications. In: Peters G., Matsui T. (eds) *Theoretical Aspects of Spatial-Temporal Modeling*. SpringerBriefs in Statistics (pp. 63-94). Springer, Tokyo.
- Peters, G.W., Nevat, I. and Matsui, T., 2015. How to utilize sensor network data to efficiently perform model calibration and spatial field reconstruction. In: Peters G., Matsui T. (eds) *Modern Methodology and Applications in Spatial-Temporal Modeling*. SpringerBriefs in Statistics (pp. 25-62). Springer, Tokyo.
- Ames, M., Peters, G.W., Bagnarosa, G. and Kosmidis, I., 2015. Upside and downside risk exposures of currency carry trades via tail dependence. In *Innovations in quantitative risk management* (pp. 163-181), Glau K., Scherer M., Zagst R. (eds). Springer Proceedings in Mathematics & Statistics, vol 99. Springer, Cham.
- 12. **Peters, G.W.** and Panayi, E., 2016. Understanding modern banking ledgers through blockchain technologies: Future of transaction processing and smart contracts on the internet of money. In *Banking beyond banks and money* (pp. 239-278). Springer, Cham.
- 13. Peters, G.W. and Vishnia, G.R., 2018. Blockchain architectures for electronic exchange reporting requirements: EMIR, Dodd Frank, MiFID I/II, MiFIR, REMIT, Reg NMS and T2S. In *Handbook of Blockchain, Digital Finance, and Inclusion, Volume 2* (pp. 271-329). Academic Press.
- 14. **Peters, G.W.**, Shevchenko, P.V. and Cohen, R., 2018. Understanding cyber-risk and cyber-insurance. In *FinTech: Growth and Deregulation* (Chapter 12, pp. 1-31). Risk Books.
- 15. Peters, G.W., Shevchenko, P.V., Cohen, R. and Maurice, D., 2018. Statistical machine learning analysis of cyber risk data: event case studies. In *FinTech: Growth and Deregulation* (Chapter 3, 28 pages). Risk Books.
- 16. **Peters, G.W.,** Panayi, E. and Septier, F., 2018. Sequential Monte Carlo-ABC methods for estimation of stochastic simulation models of the limit order book. In Sisson, S. A., Y. Fan and M. A. Beaumont (eds.), *Handbook of Approximate Bayesian Computation* (pp. 437-480). Chapman and Hall/CRC.

Refereed journal articles (peer reviewed)

Note: The authored journal papers were all subject to journal specific academic peer review. Some were single blind, some were double blind and others were triple blind. In each case, the majority of papers (except for 5 special cases) were subject to revisions from reviewers and extensions of the work in some manner either minor corrections or major corrections. I have not listed these outcomes per paper as the final result of these processes was an accepted manuscript that appeared (or is to appear) in a peer reviewed academic publication.

- First two special cases were the paper with the Bank of England (BOE white paper) which was peer
 reviewed independently by academics and industry experts including revisions prior to publication as a
 BOE report. The other analogous exception was the HK Monetary Authority report, also peer reviewed in
 similar fashion to the BOE report but not an academic journal publication source, rather a
 government/industry peer reviewed publication white paper.
- Third special cases was the peer reviewed response to the Bank of International Settlements BIS on Basel III Simplified Measurement Approach and proposed changes to the Advanced Measurement Approach. It was published on the BIS website after review.
- Two special cases were the papers that were peer reviewed for the NeurIPS workshop. These papers were peer reviewed as part of the NeurIPS review process and then presented in workshops.
- Optus-Macquarie Cyber Risk Center paper is industry peer reviewed.

- 17. Chalkiadakis I., Yan H., Peters G.W. and Shevchenko P.V. 2021. Infection Rate Models for COVID-19: Model Risk and Public Health News Sentiment Exposure Adjustment. *PLOS ONE* (to appear)
- S. Clinet, W.T.M. Dunsmuir, G.W. Peters & K.A. Richards 2021. Asymptotic Distribution of the Score Test for Detecting Marks in Hawkes Processes. *Statistical Inference for Stochastic Processes*. (to appear)
- 19. Ju B., Divakaran D., Nevat I., **Peters G.W.** and Gurusamy M. 2021. Cost-aware Feature Selection for IoT Device Classification. *IEEE Internet of Things Journal* (to appear)
- 20. Laurent Clavier, **Peters G.W**., François Septier, Ido Nevat 2021. Impulsive Noise Modeling and Robust Receiver Design. *EURASIP Journal on Wireless Communications and Networking*. (to appear)
- P. Shevchenko, J. Jang, M. Malavasi, G.W. Peters, G. Sofronov & S. Truck 2021. Quantification of Cyber Risk -Risk Categories and Business Sectors. *Optus Macquarie University Cyber Security Hub. Telecommunications Industry Optus White Paper*. (to appear)
- 22. Tipakornrojanakit K., Chudtong M., **Peters G.W.** and Satiracoo P. 2021. Covariance Forecasting Methods For Dynamic Asset Allocation. International Journal of Data Science and Big Data Analytics. (to appear)
- 23. Jiang, Y., Macrina, A. and **Peters, G.W.**, 2021. Multiple barrier-crossings of an Ornstein-Uhlenbeck diffusion in consecutive periods. *Stochastic Analysis and Applications* (to appear)
- 24. Murakami, D., **Peters, G.W.**, Matsui, T. and Yamagata, Y., 2021. Spatiotemporal analysis of urban heatwaves using Tukey g-and-h random field models. *IEEE Access* (to appear)
- 25. Yan, H., **Peters, G. W.** and Chan, J., 2021. Mortality models incorporating long memory improves life table estimation: a comprehensive analysis. *Annals of Actuarial Science*. (to appear)
- 26. Fonseca, J.A., Nevat, I. and **Peters, G.W.**, 2020. Quantifying the uncertain effects of climate change on building energy consumption across the United States. *Applied Energy*, 277, p.115556.
- 27. Xiang, Q., Nevat, I. and **Peters, G. W.**, 2020. Bayesian Spatial Field Reconstruction with Unknown Distortions in Sensor Networks. *IEEE Transactions on Signal Processing*, to Appear.
- 28. Marowka, M., **Peters, G.W.**, Kantas, N. and Bagnarosa, G., 2020. Factor-augmented Bayesian cointegration models: a case-study on the soybean crush spread. *Journal of the Royal Statistical Society: Series C (Applied Statistics)*, to Appear
- 29. Yan, H., **Peters, G.W.** and Chan, J.S., 2020. Multivariate Long-Memory Cohort Mortality Models. *ASTIN Bulletin: The Journal of the IAA*, *50*(1), pp.223-263.
- Koh, J.Y., Peters, G.W., Nevat, I. and Leong, D., 2020. Privacy Considerations in Participatory Data Collection via Spatial Stackelberg Incentive Mechanisms. *Methodology and Computing in Applied Probability*, pp. 1-32.
- 31. Ames, M., Bagnarosa, G., Matsui, T., **Peters, G.W.** and Shevchenko, P.V., 2020. Which risk factors drive oil futures price curves? *Energy Economics*, *87*, p.104676.

- 32. Koh, J.Y., Peters, G.W., Nevat, I. and Leong, D., 2020. Probabilistic routing in wireless networks with privacy guarantees. *Computer Communications*, *151*, pp. 228-237.
- 33. Vishnia, G.R. and **Peters, G.W.**, 2020. AuditChain: A Trading Audit Platform Over Blockchain. *Frontiers in Blockchain*, *3*, p.9.
- 34. Dias, F.S. and **Peters, G.W.**, 2019. A Non-parametric Test and Predictive Model for Signed Path Dependence. *Computational Economics* 56, pp.1-38.
- 35. Dalessandro, A. and **Peters, G.W.**, 2019. Efficient and Accurate Evaluation Methods for Concordance Measures via Functional Tensor Characterizations of Copulas. *Methodology and Computing in Applied Probability*, pp. 1-36.
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- 40. Zhang, P., Nevat, I., **Peters, G.W.,** Septier, F. and Osborne, M.A., 2018. Spatial field reconstruction and sensor selection in heterogeneous sensor networks with stochastic energy harvesting. *IEEE Transactions on Signal Processing*, *66*(9), pp. 2245-2257.
- 41. Ames, M., Bagnarosa, G., **Peters, G.W.** and Shevchenko, P.V., 2018. Understanding the interplay between covariance forecasting factor models and risk-based portfolio allocations in currency carry trades. *Journal of Forecasting*, *37*(8), pp.805-831.
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- 45. Yan, S., **Peters, G.W.**, Nevat, I. and Malaney, R., 2017. Location verification systems based on received signal strength with unknown transmit power. *IEEE Communications Letters*, 22(3), pp.650-653.
- 46. Targino, R.S., Peters, G.W., Sofronov, G. and Shevchenko, P.V., 2017. Optimal exercise strategies for operational risk insurance via multiple stopping times. *Methodology and Computing in Applied Probability*, 19(2), pp.487-518.

- 47. Egan, M., **Peters, G.W.**, Nevat, I., Shirvanimoghaddam, M. and Collings, I.B., 2017. A ruin theoretic design approach for wireless cellular network sharing with facilities. *Transactions on Emerging Telecommunications Technologies*, 28(7), p.e3141.
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- 50. Peters, G.W., Targino, R.S. and Wüthrich, M.V., 2017. Bayesian modelling, Monte Carlo sampling and capital allocation of insurance risks. *Risks*, *5*(4), p.53.
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- 54. Nevat, I., Zhang, P., Frenkel, G. and **Peters, G.W.**, 2017. Parameter estimation in sensor networks under probabilistic censoring. *IEEE Transactions on Signal Processing*, 65(15), pp.4047-4058.
- 55. Fung, M.C., **Peters, G.W.** and Shevchenko, P.V., 2017. A unified approach to mortality modelling using state-space framework: characterisation, identification, estimation and forecasting. *Annals of Actuarial Science*, *11*(2), pp.343-389.
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- 57. De Freitas, M.L., Egan, M., Clavier, L., Goupil, A., **Peters, G.W.** and Azzaoui, N., 2017. Capacity Bounds for Additive Symmetric alpha-Stable Noise Channels. *IEEE Transactions on Information Theory*, *63*(8), pp.5115-5123.
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- 60. Karimalis, E., Kosmidis, I. and **Peters, G.W.**, 2017. Multi yield curve stress-testing framework incorporating temporal and cross tenor structural dependencies. *Bank of England Working Paper Staff Working Paper No.* 655.

- 61. **Peters, G.W.** and Vishnia, G.R., 2016. Overview of Emerging Blockchain Architectures and Platforms for Transparency and Pre and Post Trade Reporting from Electronic Exchanges. *White Paper, ASTRI and Hong Kong Monetary Authority*.
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- 63. Peters, G.W., Chen, W.Y. and Gerlach, R.H., 2016. Estimating quantile families of loss distributions for non-life insurance modelling via L-moments. *Risks*, 4(2), p.14.
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- 69. Zhang, P., Nevat, I., Peters, G.W. and Clavier, L., 2016. Event detection in sensor networks with nonlinear amplifiers via mixture series expansion. *IEEE Sensors Journal*, *16*(18), pp.6939-6946.
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- 79. Zhang, P., Nevat, I., **Peters, G.W.**, Xiao, G. and Tan, H.P., 2015. Event detection in wireless sensor networks in random spatial sensors deployments. *IEEE Transactions on Signal Processing*, 63(22), pp.6122-6135.
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- Nevat, I., Peters, G.W., Septier, F. and Matsui, T., 2015. Estimation of spatially correlated random fields in heterogeneous wireless sensor networks. *IEEE Transactions on Signal Processing*, 63(10), pp.2597-2609.
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