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李华楼 306 室

2023–至今	North American Actuarial Journal 联席主编
2022–至今	Insurance: Mathematics and Economics 副主编
2021	Methodology and Computing in Applied Probability 专刊客座主编
2021	Insurance: Mathematics and Economics 专刊客座主编
2019–2023	North American Actuarial Journal 副主编
2018–至今	Methodology and Computing in Applied Probability
2021	Annals of Actuarial Science 专刊客座主编
2021–至今	Annals of Actuarial Science 副主编
2017	Quantitative Finance and Economics 专刊客座主编
2016–至今	Quantitative Finance and Economics 副主编

荣誉奖项

2023 会

2022 伊 伊 克

2021 会 会 佳

2020 产 会 佳

2019 全 专业 会 会 佳

2016 伊 伊 伦

2012 分

专著

[redacted] 《风险共担 I：从古罗马到以太坊》，中国金融出版社

[redacted] *Decentralized Insurance: Technical Foundation of Business Models*, Springer (该书被列为北美精算师正精算师考试公司金融与企业风险管理基础考试用书)

[redacted] *Pandemics: Insurance and Social Protection*. Springer (章节：Epidemic compartment models and their insurance applications, 合作者：L. Jin, S.-H. Loke, L. Zhang)

[redacted] *An Introduction to Computational Risk Management of Equity-Linked Insurance*, Chapman and Hall/CRC Financial Mathematics Series. (该书被列为北美精算师正精算师考试量化金融考试用书)

[redacted] *ACTEX Study Manual for SOA Exam SRM-Statistics for Risk Modeling*, ACTEX Learning. (合作者: D. Linders, A. Lo)

List of Publications

Runhuan Feng

Academic Journals

47. S. Abdikerimova, T. Boonen, R. Feng. (2024) Multi-period peer-to-peer risk sharing. *Journal of Risk and Insurance*, Forthcoming.

46. Chen, Z., R. Feng, L. Wei, Zhao, J. (2023) Cost-e f ectiveness, fairness and adverse selection in mutual aid. *European Financial Management*, Forthcoming.

45. Feng, R., Liu, C., Taylor, S. (2023). Peer-to-peer risk sharing with an application to food risk pooling. *Annals of Operations Research*, 321(1-2), 813-842.

44. S. Abdikerimova, R. Feng. (2022) Peer-to-peer multi-risk insurance and mutual aid. *European Journal of Operational Research.* 299 (2), 735{749.

43. R. Feng, P. Li. (2022) Sample recycling method { a new approach to e f cient nested Monte Carlo simulations. *Insurance: Mathematics and Economics*. 105, 336{359.

42. M. Dacorogna, R. Feng, J. S. H. Li, A. Olivieri. (2022). Managing the risk of mortality shocks. *Annals of Actuarial Science*, 16(3), 425{427.

41. R. Feng, R.J. A. Laeven, S. X. Lin (2022). Editorial to the virtual special issue on emerging risks and insurance technology. *Insurance: Mathematics and Economics*, 107, 418{421.

40. R. Feng, G. Gan, N. Zhang. (2022) Variable annuity pricing, valuation, and risk management: a survey. *Scandinavian Actuarial Journal.* 2022:10, 867{900.

39. R. Feng, J. Figueroa-Lopez, C. Lefévre, J. Guo. (2022) Editorial for Special Issue on Advances in Actuarial Science and Quantitative Finance. *Methodology and Computing in Applied Probability*. 24, 2, 475{ 479.

38. X. Chen, W. Chong, R. Feng, L. Zhang. (2021) Pandemic risk management: resources contingency planning and allocation. *Insurance: Mathematics and Economics*, 101, 359{383. *Awarded research grant from the Canadian Institute of Actuaries.*

37. W. Chong, R. Feng, L. Jin. (2021) Holistic principle for risk aggregation and capital allocation. *Annals of Operations Research*, Forthcoming.

36. R. Feng, P. Jiang, H. Volkmer. (2021) Geometric Brownian motion with a f ne drift and its time-integral. *Applied Mathematics and Computation*, 395, 125874.

35. P. Li, R. Feng. (2021) Nested Monte Carlo simulation in f nancial reporting: a review and a new hybrid approach. *Scandinavian Actuarial Journal*, 2021, 9, 744{778.

34. R. Feng, B. Yi. (2019) Quantitative modeling of risk management strategies: stochastic reserving and dynamic hedging of variable annuity guaranteed bene f ts. *Insurance: Mathematics and Economics*, 85, 60{73.

33. E.C.K. Cheung, R. Feng. (2019) Potential measures and expected present value of operating costs until ruin in renewal risk models with general interclaim times. *Scandinavian Actuarial Journal*, 2019(5), 355{386.

32. R. Feng, A. Kuznestov, F. Yang. (2019) Exponential functionals of Levy processes and variable annuity guaranteed bene f ts. *Stochastic Processes and their Applications*, 129 (2), 604{625.

31. Z. Cui, R. Feng, A. MacKay. (2017) Variable annuities with VIX-linked fee structure under a Heston-type stochastic volatility model. *North American Actuarial Journal*, 21(3), 458{483.

30. R. Feng, X. Jing, J. Dhaene. (2017) Comonotonic approximations of risk measures for variable annuity guaranteed bene f ts with dynamic

policyholder behavior. *Journal of Computational and Applied Mathematics*, 311, 272{292.

29. R. Feng, J. Vecer. (2017) Risk-based capital requirements for guaranteed minimum withdrawal benefit. *Quantitative Finance*, 17(3), 471{478.

28. R. Feng, X. Jing. (2016) Analytical valuation and hedging of variable annuity guaranteed lifetime withdrawal benefits. *Insurance: Mathematics and Economics*, 72, 36{48.

27. R. Feng, Y. Shimizu. (2016) Applications of central limit theorems for equity-linked insurance. *Insurance: Mathematics and Economics*, 69, 138{148.

26. R. Feng, A. Kuznestov, F. Yang. (2016) A short proof of duality relations for hypergeometric functions. *Journal of Mathematical Analysis and Applications*, 443(1), 116{122.

25. R. Feng, H. Huang. (2016) Statutory financial reporting for variable annuity guaranteed death benefits: Market practice, mathematical modeling and computation. *Insurance: Mathematics and Economics*, 67, 54{64.

24. R. Feng. (2016) Stochastic integral representations of the extrema of time-homogeneous diffusion processes. *Methodology and Computing in Applied Probability*, 18(3), 691{715.

23. R. Feng, H.W. Volkmer. (2016) An identity of hitting times and its application to the valuation of guaranteed minimum withdrawal benefit. *Mathematics and Financial Economics*, 10(2), 127{149.

22. R. Feng, H.W. Volkmer. (2015) Conditional Asian options. *International Journal of Theoretical and Applied Finance*, 18 (6), 1550040.

21. R. Feng, H.W. Volkmer, S. Zhang, C. Zhu. (2015) Optimal dividend policies for piecewise-deterministic compound Poisson risk models, *Scandinavian Actuarial Journal*, 2015 (5), 423{454.

20. R. Feng, Y. Shimizu. (2014) Potential measures of spectrally negative Markov additive processes with applications to ruin theory. *Insurance: Mathematics and Economics*, 59, 11{26.

19. R. Feng, H.W. Volkmer. (2014) Spectral methods for the calculation of risk measures for variable annuity guaranteed benefts. *ASTIN Bulletin*, 44 (3), 653{681.

18. R. Feng. (2014) A comparative study of risk measures for guaranteed minimum maturity benefts by a PDE method. *North American Actuarial Journal*, 18(4), 445{461.

17. R. Feng, Y. Shimizu. (2013) On a generalization from ruin to default in Lévy insurance risk models, *Methodology and Computing in Applied Probability*, 15 (4), 773{802.

16. E.C.K. Cheung, R. Feng. (2013) A unifed analysis of claim costs up to ruin in a Markovian arrival risk model. *Insurance: Mathematics and Economics*, 53 (1), 98{109.

9. R. Feng. (2009) On the total operating costs up to default in a renewal risk model, *Insurance: Mathematics and Economics*, 34 (2), 305-314.

8. J. Cai, R. Feng, G.E. Willmot. (2009) On the expectation of total discounted operating costs up to default and its applications, *Advances in Applied Probability*, 41 (2), 495-522.

7. J. Cai, R. Feng, G.E. Willmot. (2009) Analysis of the compound Poisson surplus model with liquid reserves, interest and dividends, *ASTIN Bulletin*, 39 (1): 225-247.

6. J. Cai, R. Feng, G.E. Willmot. (2009) The compound Poisson surplus model with interest and liquid reserves: analysis of the Gerber-Shiu discounted penalty function, *Methodology and Computing in Applied Probability*, 11 (3): 401-423.

Books and Book Chapters

5. R. Feng. (2022) *Decentralized Insurance: Technical Foundation of Business Models*. Springer. (Designated as a textbook for SOA Fellowship Exam { Foundation of Corporate Finance and Enterprise Risk Management (CFE) Exam starting from Fall 2023.)

4. R. Feng, J.Garrido, L. Jin, S.-H. Loke, L. Zhang. (2021) Epidemic compartment models and their insurance applications, In *Pandemics: Insurance and Social Protection*. Springer.

3. R. Feng. (2018) *An Introduction to Computational Risk Management of Equity-Linked Insurance*, Chapman and Hall/CRC Financial Mathematics Series. https://www.crcpress.com/An-Introduction-to-Computational-Risk-Ma
Feng/p/book/9781498742160
(Designated as a textbook for SOA Fellowship Exam { QFI Quantitative Finance Exam.)

2. R. Feng, D. Linders, A. Lo. (2018) *ACTEX Study Manual for SOA Exam SRM - Statistics for Risk Modeling*. ACTEX Learning.

1. R. Feng, Z. Cui, P. Li. (2016) Nested stochastic modeling for insurance companies. Society of Actuaries. https://www.soa.org/research/nested-stochastic-modeling-report.pdf

Technical Reports and Professional Articles

8. Z. Quan, L. Zhang, W.F. Chong, R. Feng (2023) CyLit: An NLP-Powered Repository and Search Tool for Cyber Risk Literature, Society of Actuaries. https://www.soa.org/resources/research-reports/2023/cylit-nlp-search/

7. R. Feng, J. L. Hong (2021) The quest for rising stars. *The Actuary*, November 2021. https://theactuarymagazine.org/the-quest-for-rising-stars/ www.theactuarymagazine.org.

6. R. Feng, L. Jin (2021) Managing Investment Risks in Contractual Designs. *Risk Management*, September 2021. https://www.soa.org/sections/joint-risk-mgmt/joint-risk-mgmt-newsletter/2021/september/rm-2021-09-feng-jin/

5. R. Feng (2021) Innovations in decentralized insurance - peer-to-peer and mutual aids. Hi Marley Blog. https://www.himarley.com/blog/2021/5/3/gt2ng8pg2p9u35dq04d4z25wuq4i41

4. R. Feng. (2021) Recognizing future academic leaders: the creation of an early career award in actuarial science. *Expanding Horizon*. April.

3. R. Feng, L. Jin, S.-H. Loke. (2021) Interplay between epidemiology and actuarial modeling. *Casualty Actuarial Society E-Forum*, Spring 2021.

2. R. Feng. (2015) A thought on Fermi problems for actuaries. *The Modeling Platform*, 1: 22{27.

1. R. Feng, S. K. Boddapati. (2018) Undergraduate research in risk and actuarial science at the University of Illinois. *Expanding Horizon*.

Completed Working Papers

12. R. Feng, P. Liu. (2024) A unifed theory of decentralized insurance and annuities. *Submitted*.

11. R. Feng, M. Li, M. Bichuch. (2023) Pricing by stake in DeFi insurance.

10. R. Feng, M. Li (2023) Distributed insurance: allocation of risk and reward.

9. Z. Chen, R. Feng, W. Hu, Y. Mao. (2023) Optimal risk pooling of peer-to-peer insurance. *Revised & Resubmitted*.

8. R. Feng, M. Liu, N. Zhang (2022) A unifed theory of decentralized insurance. *Submitted*.

7. S. Abdikerimova, R. Feng, D. Linders (2022) Peer-to-peer pandemic bond: an alternative to the world bank's health emergency fnancing solution.

6. Z. Chen, R. Feng, H. Li, T. Yang (2022) Coping with longevity via hedging: fair dynamic valuation of variable annuities. *Revised & Resubmitted.*

5. W.F. Chong, R. Feng, H. Hu, L. Zhang (2022) Cyber Risk Assessment for Capital Management. *Revised & Resubmitted*.

4. Z. Chen, R. Feng, L. Wei, J. Zhao (2021) Online mutual aid versus traditional health insurance: competition or complement? *Revised & Resubmitted*

3. R. Feng, L. Jin, S.H. Loke (2022) Healthcare loss triangle using epidemiology models. *Submitted*.

2. R. Feng, P. Jiang, H. Volkmer. (2020) The persistence of winning streaks in fnancial markets. *Global Association of Risk Professionals (GARP) Best Paper Award for Quantitative Methods in Finance 2019*.

1. Z. Chen, R. Feng, C. Liu, L. Wei (2021) An economic theory of decentralized insurance. *Revised & Resubmitted.*