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Education Ph.D. in Statistics and Actuarial Science, University of Iowa, USA, 2007
M.Phil. in Statistics and Actuarial Science, University of Hong Kong, Hong Kong, 2004
B.Sc. in Actuarial Science, University of Hong Kong, Hong Kong, 2002

Professional Qualification Fellow Member, Society of Actuaries

Positions Held Director, BBA in Insurance, Financial and Actuarial Analysis programme, CUHK (Sept 2014 – present)
Associate Prof. of Practice in Actuarial Science (March 2014), CUHK
Assistant Prof. (Sep 2007), CUHK

Research Interest Actuarial science, insurance risk models, stochastic processes and its applications in insurance and finance

Research and Scholarship

1. Publications in Academic Journals

- 2015 S. H. Li, Y. X. Liu and A. C. Y. Ng, “Option Pricing under GARCH Models with Hansen’s Skewed-t Distributed Innovations,” *North American Journal of Economics and Finance*, 31, 108 – 125.
- 2014 K. A. Fu and A. C. Y. Ng. “Asymptotics for Ruin Probabilities of a Time-dependent Renewal Risk model with Geometric Lévy Process Investment Returns and Dominated-varying-tailed Dependent Claims,” *Insurance: Mathematics and Economics*, 56, 80 – 87.
- K. A. Fu and A. C. Y. Ng. “Uniform Tail Asymptotics for Sum of Two Correlated Classes with Stochastic Returns and Dependent Heavy Tails,” *Stochastic Models*, 30(2), 197 – 215.
- 2013 W. S. Chan, S. H. Li and A.C.Y. Ng. “Pricing Options on Stocks Denominated in Different Currencies: Theory and Illustration,” *The North American Journal of Economics and Finance*, 26, 339 – 354.
- S. H. Li and A. C. Y. Ng. “Pricing and Hedging Variable Annuity Guarantees with Multi-Asset Stochastic Investment Models,” *North American Actuarial Journal*, 17(1), 41 – 62.

- K. A. Fu and A. C. Y. Ng. "A Note on the Strong Approximation for Long Memory Processes and Its Application," *Statistics: A Journal of Theoretical and Applied Statistics*, 47(3), 511 – 520.
- W. S. Chan, S. H. Li and A. C. Y. Ng. "Stochastic Life Table Forecasting: A Time-simultaneous Fan Chart Applications," *Mathematics and Computers in Simulation*, 93, 98 – 107.
- K. A. Fu, Y. Li and A. C. Y. Ng. "Asymptotics for the Residual-based Approximation in nearly Non-stationary AR(1) Models with Possibly Heavy-tailed Innovations," *Statistics and Probability Letters*, 83(11), 2553 – 2562.
- 2011 S. H. Li and A. C. Y. Ng. "Canonical Valuation of Mortality-linked Securities," *Journal of Risk and Insurance*, 78(4), 853 – 884.
- W. S. Chan, S. H. Li and A. C. Y. Ng. "On the Calibration of Mortality Forward Curves," *Journal of Futures Markets*, 31(10), 947 – 970.
- S. H. Li and A. C. Y. Ng. "Pricing Variable Annuity Guarantees with the Multivariate Esscher Transform," *Insurance: Mathematics and Economics*, 49(3), 393 – 400.
- W. S. Chan, S. H. Li and A. C. Y. Ng. "Modeling Investment Guarantees in Japan: A Risk-Neutral GARCH Approach," *International Review of Financial Analysis*, 20, 20 – 26.
- W. S. Chan, S. H. Li and A. C. Y. Ng. "Modeling Old-Age Mortality Risk for the Populations of Australia and New Zealand: An Extreme Value Approach," *Mathematics and Computers in Simulation*, 81, 1325 – 1333.
- 2010 A. C. Y. Ng. "On the Upcrossing and Downcrossing Probabilities of a Dual Risk model with Phase-type Gains," *ASTIN Bulletin*, 40(1), 281 – 306.
- 2009 A. C. Y. Ng. "On a Dual Model with a Dividend Threshold," *Insurance: Mathematics and Economics*, 44(2), 315 – 324.
- 2006 A. C. Y. Ng and H. Yang. "On the Joint Distribution of Surplus before and after Ruin under a Markovian Regime Switching Model," *Stochastic Processes and Their Applications*, 116, 244 – 266.
- 2005 A. C. Y. Ng and H. Yang. "Lundberg-type Bounds for the Joint Distribution of Surplus Immediately before and at Ruin under the Sparre Andersen model," *North American Actuarial Journal*, 9(2), 85 – 100.
- A. C. Y. Ng and H. Yang. "Lundberg-type Bounds for the Joint Distribution of Surplus Immediately before and at Ruin under a Markov-modulated Risk Model," *ASTIN Bulletin*, 35(2), 351 – 361.

2. Research Grants

- 2009 RGC Grant Direct Allocation: Compound Poisson Dual Insurance Model with a Two-layer Threshold and Barrier Dividend Strategy
- 2008 RGC Grant Direct Allocation: Compound Poisson Dual Insurance Model with a Barrier Dividend Strategy

3. Service to Journals

Reviewer for

- *Insurance: Mathematics and Economics*
- *North American Actuarial Journal*
- *ASTIN Bulletin*
- *Applied Stochastic Models in Business and Industry*
- *Journal of the Korean Statistical Society*

4. Service to Conference

- 2012 Member of Scientific Committee, the 16th Insurance: Mathematics and Economics Conference

5. Conference Presentation

- 2013 Presented “Calibration of Mortality Forward Curve” in Longevity Risk: Recent Developments and Actuarial Implications, a workshop organized by the Society of Actuaries and the Chinese University of Hong Kong
- 2011 Presented “Pricing Variable Annuity Guarantees with the Multivariate Esscher Transform” in the 15th Insurance: Mathematics and Economics Conference
- 2010 Presented “On the Upcrossing and Downcrossing Probabilities of a Dual Risk model with Phase-type Gains” in the 14th Insurance: Mathematics and Economics Conference
- 2009 Presented “On a Dual Model with a Dividend Threshold” in the 13th Insurance: Mathematics and Economics Conference

Awards and Honors

- 2015 Faculty Outstanding Teaching Award 2013 – 2014, awarded by the Faculty of Business, the Chinese University of Hong Kong
- 2012 Vice-Chancellor’s Exemplary Teaching Award 2011, awarded by the Chinese University of Hong Kong
- 2011 Faculty Outstanding Teaching Award 2009 – 2010, awarded by the Faculty of Business, the Chinese University of Hong Kong

Teaching Experience

The Chinese University of Hong Kong (Sep 2007 – Dec 2015)

Undergraduate Level:

- Quantitative Methods for Actuarial Analysis / Foundations of Actuarial Analysis
- Actuarial Models I
- Actuarial Models II
- Derivatives for Actuaries / Derivatives for Actuaries I
- Derivatives for Actuaries II
- Applications of Risk Models
- Construction and Evaluation of Actuarial Models

Postgraduate Level:

- Quantitative Finance
- Quantitative Risk Management

University of Iowa (Aug 2005 – May 2007)

Postgraduate Level:

- Actuarial Exam Preparation: Probability
- Actuarial Exam Preparation: Actuarial Modeling