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Fangda Liu Ph.D., ASA

Employment

Current From 2019	Assistant Professor Department of Statistics and Actuarial Science **University of Waterloo**, Waterloo, Canada
2018-2019	Assistant Professor Department of Risk Management and Insurance, J. Mack Robinson College of Business **Georgia State University**, Atlanta, U.S.
2015-2018	Assistant Professor China Institute for Actuarial Science **Central University of Finance and Economics**, Beijing, China

Education

2011-2015	**Doctor of Philosophy** in Actuarial Science **University of Waterloo**, ON, Canada Thesis: *"Optimal Reinsurance and Risk Measures"*
2009-2011	**Master of Philosophy** in Mathematics **The University of Hong Kong**, Hong Kong Thesis: *"Two Results in Financial Mathematics and Biostatistics"*
2006-2009	**Bachelor of Science** in Mathematics First Honour Degree **The University of Hong Kong**, Hong Kong

Visiting / Short Term Position

Nov 2017-Mar 2018	Postdoctoral fellow (with Steven Vanduffel and Carole Bernard) Vrije Universiteit Brussel, Belgium
Sep 2016	Visiting Scholar School of Management , University of Science and Technology of China, China
Nov 2015-Feb 2016	Research Assistant Department of Statistics, The Chinese University of Hong Kong, Hong Kong
May-Aug 2015	Part-Time Instructor Department of Statistics and Actuarial Science, University of Waterloo, Canada

Grants

2017 - 2019	National Natural Science Foundation of China (Grant No. 11601540, PI)

Publications

Published

1. Liu, F., Cai, J., Lemieux, C., and Wang, R. (2018) Convex risk functionals: representation and applications. *Insurance: Mathematics & Economics*, published online. SSRN: https://ssrn.com/abstract=3216336.
2. Lee, W.Y. and Liu, F. (2018) Analysis of a dynamic premium strategy: from theoretical and marketing perspectives. *Journal of Industrial and Management Optimization* 14(4):1545-1577.
3. Chi, Y. and Liu, F. (2017) Optimal insurance design in the presence of exclusion clauses. *Insurance: Mathematics & Economics* 76:185-195.
4. Cai, J., Lemieux, C. and Liu, F. (2016) Optimal reinsurance from the perspectives of both an insurer and a reinsurer. *ASTIN Bulletin* 46(2):815-849.
5. Cai, J., Lemieux, C. and Liu, F. (2014) Optimal reinsurance with regulatory initial capital and default risk. *Insurance: Mathematics & Economics* 57:13-24.
6. Cheung, K.C., Liu, F. and Yam, S.C.P. (2012) Average Value-at-Risk minimizing reinsurance under Wang's premium principle with constraints. *ASTIN Bulletin* 42(2): 575-600.

Submitted

1. Chi, Y. and Liu, F. (2019) Enhancing the insurer's expected value by reinsurance and external financing.
2. Bernard, C., Liu, F. and Vanduffel, S. (2018) Impact of preferences on optimal insurance in the presence of multiple policyholders. SSRN: https://ssrn.com/abstract=3270247.
3. Liu, F. and Wang, R. (2017) A theory for measures of tail risk. SSRN: https://ssrn.com/abstract=2841909.
4. Boonen, T., Liu, F. and Wang, R. (2017) Competitive equilibria in a comonotone market. SSRN: https://ssrn.com/abstract=3091424.

Conferences and Presentations

Seminar

Département de mathématiques, Université du Québec à Montréal	Mar 2019
Faculty of Economics and Business, *KU Leuven*, Belgium	Mar 2018
Department of Risk Management and Insurance, *Georgia State University*, U.S.	Feb 2018
Department of Mathematics, *Illinois State University*, U.S.	Feb 2018
Department of Statistics and Actuarial Science, *University of Waterloo*, Canada	Jan 2018
Department of Statistics, *University of Manitoba*, Canada	Jan 2018
Department of Mathematics and Statistics, *University of Regina*, Canada	Jan 2018
RiskLab, Department of Mathematics, *ETH Zurich*, Switzerland	Dec 2017
Faculty of Economics and Business, *University of Amsterdam*, Netherlands	Nov 2017
School of Economics and Statistics, *University of Milano-Biccoca*, Italy	May 2017
Department of Mathematics, *University of Illinois at Urbana-Champaign*, U.S.	Nov 2016
Institute of Statistics and Big Data, *Remin University*, China	Sep 2016
School of Management, *University of Science and Technology of China*, China	Sep 2016
China Institute for Actuarial Science, *Central University of Finance and Economics*, China	Apr 2015

Conference

INFORMS Annual Meeting 2019, *Seattle*, USA	Oct 2019
Great Lakes Analytics Conference, *University of Wisconsin-Stevens Point*, USA	Oct 2019
3rd International Congress on Actuarial Science and Quantitative Finance, Colombia	Jun 2019
2nd International Workshop on Optimal (Re)Insurance, Beijing, China	Jul 2018
7th Financial Engineering and Financial Risk Management Annual Meeting, Changsha, China	Sep 2017
21st International Congress on Insurance: Mathematics & Economics, Vienna, Austria	Jul 2017
14th Annual Conference of China Society for Industrial and Applied Mathematics, China	Aug 2016
18th International Congress on Insurance: Mathematics & Economics, Shanghai, China	Jul 2014
Annual Meeting for the Statistical Society of Canada, *University of Toronto*, Canada	May 2014
WatRISQ Graduate Student Research Presentation, *University of Waterloo*, Canada	Nov 2014/Sep 2013
16th International Congress on Insurance: Mathematics & Economics, Hong Kong, China	Jun 2012

Teaching Experience

Georgia State University

Spring Term 2019	AS 4340 - Life Contingencies I
	AS 4360 - P&C Catastrophic Modelling and Ratemaking
Fall Term 2018	AS 8340 - Life Contingencies I

Central University of Finance and Economics

Spring Term 2016	Financial Economics
	CUFE Certificate Program of IFoA: Subject CT3 - Probability and Statistics
	Academic English in Actuarial Science

University of Waterloo

Spring Term 2015	ACTSC 431/831 - Loss Model 1