

# Fenghui Yu

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		<b>Website</b>	<a href="http://fenghuiyu.github.io">http://fenghuiyu.github.io</a>
		<b>Date of Birth</b>	December 20, 1992

## Positions

**Oct 2023–Present** *Assistant Professor (Tenured)*  
**Aug 2022–Sept 2023** *Assistant Professor (Tenure-Track)*  
- Delft Institute of Applied Mathematics, TU Delft, The Netherlands

**Jun 2019–July 2022** *Postdoctoral Researcher*  
- RiskLab and Department of Mathematics, ETH Zurich, Switzerland

**Jan 2019–May 2019** *IMR Postdoctoral Fellow*  
- Department of Mathematics, The University of Hong Kong, Hong Kong

## Education

**Sept 2014–Dec 2018** Ph.D., Mathematics - The University of Hong Kong, Hong Kong  
*Research Field: Mathematical and Computational Finance*  
*Supervisor: Prof. Wai-Ki Ching*  
*Thesis: On Pricing, Hedging and Trading in Financial Management*

**Sept 2010–Jul 2014** B.S. Mathematics; B.E. Finance (Double Degree) - Jilin University, China  
*Major: Computational Mathematics; Minor: Finance and Financial Management*

## Research Interests

- Quantitative Methods in Finance, Risk Management and Actuarial Science
- Applied Probability, Stochastic Modeling and Stochastic Optimal Control
- Machine Learning, Data-driven Innovation and their Applications in Finance

## Honors and Awards

<b>2018</b>	Scientific Research Network (WOG) Grant - <i>Research Foundation Flanders (FWO), Belgium</i>
<b>2016, 2018</b>	Conference Grant for Research Postgraduate Students - <i>The University of Hong Kong, Hong Kong</i>
<b>2016</b>	SIAM Student Travel Award - <i>SIAM, USA</i>
<b>2016</b>	Doris Chen Postgraduate Travel Grant - <i>The University of Hong Kong, Hong Kong</i>
<b>2016</b>	International Student Travel Award - <i>PIMS, Canada</i>
<b>2014–2018</b>	HKU Foundation Postgraduate Fellowship - <i>The University of Hong Kong, Hong Kong</i>
<b>2014–2018</b>	Postgraduate Scholarship - <i>The University of Hong Kong, Hong Kong</i>
<b>2012–2014</b>	First Rank Scholarship - <i>Jilin University, China</i>
<b>2011–2014</b>	Outstanding Undergraduate - <i>Jilin University, China</i>
<b>2011</b>	Second Rank Scholarship - <i>Jilin University, China</i>

## Papers

- **Feng-Hui Yu**, Wai-Ki Ching, Chu-Fang Wu and Jia-Wen Gu. *Optimal Pairs Trading Strategies: a Stochastic Mean-Variance Approach*. Journal of Optimization Theory and Applications, 196, 36–55, 2023.
- Dong-Mei Zhu, Jia-Wen Gu, **Feng-Hui Yu**, Tak-Kuen Siu and Wai-Ki Ching. *Optimal Pairs Trading with Dynamic Mean-Variance Objective*. Mathematical Methods of Operations Research, 94(1), 145–168, 2021.
- Dong-Mei Zhu, Jia-Wen Gu, **Feng-Hui Yu**, Wai-Ki Ching and Tak-Kuen Siu. *How Correlation Risk in Basket Credit Derivatives Might be Priced and Managed?* IMA Journal of Management Mathematics, 32(2), 195–219, 2021.
- **Feng-Hui Yu**, Jie-Jun Lu, Jia-Wen Gu and Wai-Ki Ching. *Modeling Credit Risk with Hidden Markov Default Intensity*. Computational Economics, 54(3), 1213–1229, 2019.
- **Feng-Hui Yu**, Wai-Ki Ching, Jia-Wen Gu and Tak-Kuen Siu. *Interacting Default Intensity with Hidden Markov Process*. Quantitative Finance, 7(5), 781–794, 2017.
- Tak-Kuen Siu, **Feng-Hui Yu**, Qing-Qing Yang, Jia-Wen Gu and Wai-Ki Ching. *Pricing Participating Policies Under Hidden Markov Models via Neural Networks*. Preprint, 2019.
- **Feng-Hui Yu** and Wai-Ki Ching. *Multi-Period Optimal Mean-reverting Spread Trading Strategies with Hidden Markovian Regime Switching*. Working Paper.
- **Feng-Hui Yu**. *Optimal Convergence Trading Strategies with Cutting Loss Exit*. Working Paper.

## Co-organized Events

**Sept 2023**                      15th European Summer School in Financial Mathematics - Delft, The Netherlands

## Conference/Workshop/Research Visits

<b>June 2023</b>	<b>Invited talk</b> , 4TU.Applied Mathematics Institutes Summer Event - Delft, The Netherlands
<b>Mar 2023</b>	<b>Invited talk</b> , Dutch Mathematical Finance Seminars - TU Delft, The Netherlands
<b>Feb 2023</b>	<b>Invited talk</b> , Seminar in Mathematical Finance - McMaster University, Canada
<b>Nov 2022</b>	<b>Invited talk</b> , 14th DIAM Research Day - TU Delft, The Netherlands
<b>Oct 2022</b>	<b>Invited talk</b> , Finance Research Day - TU Delft, The Netherlands
<b>Oct 2020</b>	<b>Invited talk</b> , Seminar of Josef Teichmann's Group - ETH Zurich, Switzerland
<b>Dec 2019</b>	<b>Invited talk</b> , Youth Probability and Statistics Forum - Beijing, China
<b>Dec 2019</b>	<b>Invited talk</b> , Post/Doctoral Seminar in Mathematical Finance - ETH Zurich, Switzerland
<b>Feb 2018</b>	<b>Contributed poster</b> , Actuarial and Financial Mathematics Conference: Interplay between Finance and Insurance - Brussels, Belgium
<b>Feb 2018</b>	<b>Invited talk</b> , Workshop on Computational Science and Optimization - Hong Kong
<b>Nov 2016</b>	<b>Contributed talk</b> , SIAM Conference on Financial Mathematics and Engineering - Austin, USA
<b>Jul 2016</b>	<b>Contributed talk</b> , 6th International IMS-FIPS Workshop - Edmonton, Canada
<b>Jun 2016</b>	<b>Contributed talk</b> , 11th East Asia SIAM Conference - Macao
<b>Feb 2016</b>	<b>Contributed talk</b> , 4th Asian Quantitative Finance Conference - Osaka, Japan
<b>Aug 2015</b>	<b>Academic Visit</b> , Department of Mathematical Sciences, University of Copenhagen - Copenhagen, Denmark

## Teaching

(All of the courses were given in English)

<b>Apr–July 2023</b>	<b>Lecturer</b> , Delft Institute of Applied Mathematics - TU Delft, the Netherlands <i>Special Topics in Financial Engineering (Machine Learning in Finance)</i>
<b>Apr–July 2023</b>	<b>Lecturer</b> , Delft Institute of Applied Mathematics - TU Delft, the Netherlands <i>Quantitative Risk Management</i>
<b>Feb–May 2022</b> <b>Feb–May 2021</b>	<b>Teaching Assistant</b> , RiskLab - ETH Zurich, Switzerland <i>Quantitative Risk Management</i>
<b>Sep–Nov 2017</b>	<b>Teaching Assistant</b> , Department of Mathematics - The University of Hong Kong, Hong Kong <i>Discrete Mathematics</i>
<b>Sep–Nov 2017</b> <b>Sep–Nov 2016</b> <b>Sep–Nov 2015</b>	<b>Teaching Assistant</b> , Department of Mathematics - The University of Hong Kong, Hong Kong <i>University Mathematics I</i>
<b>Jan–May 2015</b>	<b>Teaching Assistant</b> , Department of Mathematics - The University of Hong Kong, Hong Kong <i>Computational Methods and Differential Equations with Applications</i>

## Supervision

<b>Master Students</b>	Felix Lokin (jointly with MN), 2023 - <i>TU Delft, the Netherlands</i> Vangelis Nakos, 2023 - <i>TU Delft, the Netherlands</i>
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## Additional Information

<b>Jan 2015</b>	Certificate of Teaching and Learning in Higher Education - <i>The University of Hong Kong, Hong Kong</i>
<b>Referee Service</b>	Automatica, Mathematical Methods of Operations Research, International Journal of Theoretical and Applied Finance
<b>Programming Languages</b>	MATLAB, Python Chinese (native), English (fluent)