FENGYI YUAN

CONTACT INFORMATION

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Last updated:	August 2026

EDUCATION

Tsinghua University Aug 2019 ∼ Jun 2024
Ph.D. in Mathematics
Supervisor: Prof. Zongxia Liang, Tsinghua University

Tsinghua University Aug 2015 ∼ July 2019
B.Sc. in Mathematics & Applied Mathematics
B.Sc. in Economics (a Secondary Degree)

EMPLOYMENT

The Chinese University of Hong Kong, Shenzhen Sep 2025 ∼ present
Assistant Professor
University of Michigan, Ann Arbor Aug 2024∼ Jun 2025
Byrne Research Assistant Professor
Mentor: Prof. Erhan Bayraktar, University of Michigan, Ann Arbor.
The Hong Kong Polytechnic University July 2023 ∼ Jan 2024
Research Assistant
Mentor: Prof. Xiang Yu, The Hong Kong Polytechnic University

PUBLICATIONS AND WORKING PAPERS

All authors contribute equally and are sorted in alphabetical order.

Preprints

- Xihao He and **Fengyi Yuan**. Sharp Wasserstein Convergence Rates for Empirical Path Laws of Itô Processes. Submitted, 2026. [PDF].
- Erhan Bayraktar, Xihao He, Xiang Yu and **Fengyi Yuan**. Mean-field games with rough common noise: the compactification approach. Preprint, 2026. [arXiv: 2602.22602]; [ResearchGate].
- Ahmad Aghapour, Erhan Bayraktar and **Fengyi Yuan**. Dynamic data generation and dynamic portfolio selection: an application of a score-based diffusion model. Preprint, 2025. [arXiv: 2507.09916]; [code]; [SSRN]. Presented in the poster sessions of the GenAI in Finance Workshop of NeurIPS 2025; refer to SSRN for the latest updated version.
- Xiaoli Wei, Xiang Yu and **Fengyi Yuan**. Unified continuous-time q-learning for mean-field game and mean-field control problems. Preprint, 2024. [arXiv: 2407.04521].
- Zongxia Liang, Sheng Wang, Jianming Xia and **Fengyi Yuan**. Dynamic portfolio selection under generalized disappointment aversion. Preprint, 2024. [arXiv: 2401.08323].

Journal Publications

- Bahman Angoshtari, Xiang Yu and **Fengyi Yuan**. Optimal consumption under loss-averse multiplicative habit-formation preferences. ***SIAM Journal on Financial Mathematics***, Accepted. [arXiv]; [SSRN].
- Zongxia Liang, Jianming Xia and **Fengyi Yuan**. Dynamic portfolio selection for nonlinear law-dependent preferences. ***Mathematics of Operations Research***, forthcoming. [publisher]; [arXiv].
- Guohui Guan, Qitao Huang, Zongxia Liang and **Fengyi Yuan**. Retirement decision with addictive habit persistence in a jump diffusion market. ***SIAM Journal on Financial Mathematics***, 16(3): 2025, 912–958. [publisher]; [arXiv].
- Xiang Yu and **Fengyi Yuan**. Time-inconsistent mean-field stopping problems: A regularized equilibrium approach. ***Finance and Stochastics***, forthcoming. [publisher]; [arXiv].
- Zongxia Liang, Xiaodong Luo and **Fengyi Yuan**. Equilibria for time-inconsistent singular control problems. ***SIAM Journal on Control and Optimization***, 12(6): 2024, 3213–3238. [publisher].
- Zongxia Liang, Xiaodong Luo and **Fengyi Yuan**. Consumption-investment decisions with endogenous reference point and drawdown constraint. ***Mathematics and Financial Economics***, 17: 2023, pages 285–334. [publisher].
- Zongxia Liang and **Fengyi Yuan**. Weak equilibria for time-inconsistent control: with applications to investment-withdrawal decisions. ***Mathematical Finance***, 33(3): 2023, pages 891–945. [publisher].
- Lin He, Zongxia Liang and **Fengyi Yuan**. Optimal DB-PAYGO pension management towards a habitual contribution rate. ***Insurance Mathematics and Economics***, 94(3): 2020, pages 125–141. [publisher].

ACADEMIC PRESENTATIONS

- **15th AIMS Conference**,
  Athens, Greece, July 7, 2026.
- **BFS World Congress 2026**,
  Bologna, Italy, June 29, 2026. [slides]
- **NUS Quantitative Finance Conference 2026**,
  Singapore, June 12, 2026. [slides]
- **SIAM Conference on Financial Mathematics and Engineering**,
  Miami, July 18, 2025. [slides]
- **Financial Mathematics Seminar**,
  BIMSA, May 22, 2025. [slides]
- **Financial/Actuarial Mathematics Seminar**,
  The University of Michigan, Ann Arbor, September 4, 2024.
- **2023 Global Young Scholars' Forum**,
  The Chinese University of Hong Kong (Shenzhen), Online, December 8, 2023.
- **Financial/Actuarial Mathematics Seminar**,
  The University of Michigan, Online, November 29, 2023.
- **The Mathematical Finance Series Seminars**,
  Peking University, Online, October 27, 2022.

Academic Presentations (continued)

- **The 6th PKU-NUS Annual International Conference on Quantitative Finance and Economics**,
  Peking University & National University of Singapore, Online, May 2022.
- **The 6th Asian Quantitative Finance Seminar**,
  National University of Singapore, Online, January 2021.
- **The 10th Risk Management and Actuarial Forum**,
  Renmin University of China, Beijing, China, November 2019.

EXPERIENCES

- **Student Affairs Assistant of DMS, THU**, 2019~2021.
- **Teaching Assistant for:** Functional Analysis (Fall 2020), Stochastic Analysis (Fall 2021), Probability Theory (Spring 2022).
- **Academic Assistant of Xingjian Colleage, THU**, Spring 2021.

AWARDS

- **Outstanding Doctoral Thesis** (top 10%). Tsinghua University, 2024.
- **Outstanding Graduates** (top 4%). Tsinghua University, 2024.
- **National Scholarship for Graduate Students**. Ministry of Education, China, 2020& 2023.
- **Mr. TANG Lixin Scholarship**. Tsinghua University, 2021.
- **THU Postgraduate Excellency Scholarship Second Price**. Tsinghua University, 2022.
- **THU Excellent TA Awards**. Tsinghua University, 2021&2022.