

Li Wei
Curriculum Vitae
March 2024

Occupation:

Lecturer

Mailing Address:

Department of Mathematics
National University of Singapore
Block S17
10, Lower Kent Ridge Road
Singapore 119076

Email: matliw@nus.edu.sg

Phone: +65-65168815

Work Experience

Lecturer, Department of Mathematics, National University of Singapore, Singapore, July 2018 – now

Instructor, Department of Mathematics, National University of Singapore, Singapore, July 2016 – June 2018

Research Fellow, Department of Mathematics, National University of Singapore, Singapore, February 2016 – June 2016.

Researcher, Kurt Gödel Research Center for Mathematical Logic, University of Vienna, Austria, March 2014 – January 2016.

Research Fellow, Department of Mathematics, National University of Singapore, Singapore, August 2013 – February 2014.

Teaching

National University of Singapore, July 2016 – Present.

Fundamentals of Quantitative Finance

Introduction to Quantitative Finance

Mathematical Finance I

Game Theory

Discrete Structures

Calculus

Services

Director of Quantitative Finance

Undergraduate Students Mentor

Supervision of a UROPS (Undergraduate Research Opportunities Programme in Science)

Supervision of honours year projects.

Education

National University of Singapore, Singapore.

Ph.D. in Mathematical Logic, July 2013.

Thesis Title: Classical Theorems in Reverse Mathematics and Higher Recursion Theory.

Advisor: Yue Yang.

Beijing Normal University, Beijing, China.

B.S. in Mathematics and Applied Mathematics, July 2008.

Other Experience

Cornell University, NY, United States.

Visiting Graduate Student in Mathematical Logic, August 2012 – December 2012.

Advisor: Richard Shore.

Publications

1. C. T. Chong, Wei Li, Lu Liu and Yue Yang, The strength of Ramsey's Theorem for Pairs over trees: I. Weak König's Lemma, Transactions of the American Mathematical Society, to appear.
2. C. T. Chong, Wei Li, Wei Wang and Yue Yang, On the strength of Ramsey's theorem for trees, Advances in Mathematics, 369 (2020).
3. Ziyuan Gao, Sanjay Jain, Bakhadyr Khoussainov, Wei Li, Alexander G. Melnikov, Karen Seidel and Frank Stephan. Random Subgroups of Rationals. Fortyfourth International Symposium on Mathematical Foundations of Computer Science, MFCS 2019, LIPIcs 138:25:1 – 25:14, 2019.
4. C. T. Chong, Wei Li, Wei Wang and Yue Yang, On the computability of perfect subsets of sets of positive measure, Proceedings of the American Mathematical Society, 147 (2019), pp. 4021 – 4028.
5. Cristian S. Calude, Sanjay Jain, Bakhadyr Khoussainov, Wei Li and Frank Stephan. Deciding parity games in quasipolynomial time. SIAM Journal on Computing 51(2):17 – 152, 2022. Proceedings of the 49th Annual ACM SIGACT Symposium on Theory of Computing, STOC 2017, Montreal, QC, Canada, June 19 – 23, 2017. pp. 252 – 263, ACM, 2017. (STOC 2017 Best Paper Award).
6. Fragments of Kripke-Platek set theory and the metamathematics of α -recursion theory, with Sy Friedman and Tin Lok Wong, Archive for Mathematical Logic, November 2016, vol. 55, no. 7, pp. 899 – 924.
7. Δ_2 degrees without Σ_1 induction, Israel Journal of Mathematics, vol. 201, no. 2, April 2014, pp. 989 – 1012.

8. Nonstandard models in recursion theory and reverse mathematics, with Chi Tat Chong and Yue Yang, *The Bulletin of Symbolic Logic*, vol. 20, no. 2, June 2014, pp. 170 – 200.
9. Friedberg numbering in fragments of Peano arithmetic and α -recursion theory, the *Journal of Symbolic Logic*, vol. 78, no. 4, December 2013, pp. 1135 – 1163.

Fellowships and Awards

1. Faculty Teaching Award, Faculty of Science, National University of Singapore, National University of Singapore, 2019, 2021 and 2023.
2. President's Graduate Fellowship, National University of Singapore, August 2008 – July 2012.
3. Teaching Assistant (Part-Time) Award, Faculty of Science, National University of Singapore, 2012.
4. Top Graduate Tutor, Department of Mathematics, National University of Singapore, 2010 and 2012.
5. Excellent Graduate of Beijing Normal University, Beijing, China, 2008.
6. Excellent Graduate of the City of Beijing, Beijing, Beijing, China, 2008.