Melih İşeri

Curriculum Vitae

Ann Arbor, MI, 48109
+1 (323) 568 9052
iseri@umich.edu
melihiseri.com

Work Experience

2023- Assistant Professor of Mathematics (non-tenure track), *University of Michigan*

Education

2017–2023 **Ph.D.**, *University of Southern California*, Mathematics
– Advisor: Prof. Jianfeng Zhang

2012–2017 **B.S.**, *Bogazici University*, Physics
– Advisor: Prof. Muhittin Mungan

Research Interests

(Mean-Field) Games, Learning, Geometric Set-Valued Analysis, Stochastic Controls, Math Finance

Publications & Preprints

2025 M. İşeri, & E. Bayraktar. **The Learning Approach to Games**,
arXiv:2503.00227

2023 M. İşeri, & J. Zhang. **Set Valued HJB Equations**,
arXiv:2311.05727 (under revision at Annals of Probability)

2021 M. İşeri, & J. Zhang. **Set Values for Mean Field Games**,
Transactions of the American Mathematical Society

2016 M. İşeri, D. Kaspar, & M. Mungan. **Depinning as a coagulation process.**
Europhysics Letters (designated Editor's Choice, appeared on Highlights of 2016)

Award & Fellowship

2025 MIDAS Postdoctoral Affiliate
Michigan Institute for Data & AI in Society - University of Michigan

2022 USC Math Research Award
Edward and Dolores Blum

Service

2025&2026 Admissions Committee
Quantitative Finance and Risk Management M.S. Program, University of Michigan

2025 Supervising Neil Mascarenhas on Algorithmic Collusion

Refereed for:
– Applied Mathematics and Optimization
– SIAM Journal on Financial Mathematics
– ESAIM: Control, Optimisation and Calculus of Variations
– Dynamic Games and Applications
– Stochastics and Dynamics
– Stochastics
– Numerical Algebra, Control and Optimization

Presentations

2025	**SIAM**, Financial Mathematics and Engineering, *Set Valued PDEs and Games*
2025	**Byrne Conference**, on Stochastic Analysis in Finance and Insurance, *The Learning Approach to Games*
2025	**Temple University**, *Set Valued PDEs and Games*
2025	**University of Michigan**, Financial and Actuarial Mathematics, *The Learning Approach to Games*
2024	**Rutgers University**, Equilibrium Summer School, *Set Valued HJB Equations*
2024	**SIAM Annual Meeting**, *Set Valued HJB Equations*
2024	**The University of British Columbia**, New Trends and Challenges in Stochastic Differential Games Workshop, *Set Valued HJB Equations*
2023	**Florida State University**, Financial Mathematics Seminar, *Set Values of Mean Field Games*
2023	**University of Michigan**, Financial and Actuarial Mathematics, *Set Valued HJB Equations*
2023	**Western Conference on Mathematical Finance**, *Set Valued HJB Equations*
2023	**Columbia University**, Mathematical Finance Seminar Series, *Set Valued HJB Equations*
2022	**University of Michigan**, Financial and Actuarial Mathematics, *Set Valued HJB Equations*
2022	**University of Southern California**, Probability and Statistics Seminar, *Set Valued HJB Equations*
2022	**Bilkent University**, Fifth International Conference on Set Optimization with Applications to Economics, Finance, Statistics and Game Theory, *Set Valued HJB Equations*
2021	**University of Southern California**, Probability and Statistics Seminar, *Set Values for Mean Field Games*
2021	**Humboldt-Universität zu Berlin**, 6th Berlin Workshop for Young Researchers in Math Finance, *Set Values for Mean Field Games*
2021	**SIAM**, Conference on Financial Mathematics and Engineering, *Set Values for Mean Field Games*
2016	**Institute of Theoretical Physics**, 6th Warsaw School of Statistical Physics, *Depinning as a Coagulation Process*, Poster presentation
2015	**APS** Mirror Conference, Istanbul, *Depinning and the Smoluchowski Equation*
2014	**21st Statistical Physics Days**, Kayseri, *Numerical Study of Avalanche Sizes in a Model Exhibiting Dynamic Criticality*
2014	**APS** Mirror Conference, Istanbul, *Study of Avalanche Sizes in a Model Exhibiting Dynamic Criticality*

Computer Skills

Python Library	D. Kaspar and M. İşeri. *kmtoy: Python package for 'Depinning as a coagulation process'.* (2016) , *DOI: 10.7301/Z0668B3H*
GitHub	github.com/melihiseri

Teaching Experience

Fall 2025	Instructor, *Introduction to Stochastic Analysis for Finance (Math 474)*
Winter 2025	Instructor, *Discrete State Stochastic Processes (Math 526)*
Fall 2024	Instructor, *Introduction to Stochastic Analysis for Finance (Math 474)*
Spring 2024	Instructor, *Mathematics of Finance (Math 423)*
Winter 2024	Instructor, *Mathematics of Finance (Math 423)*
Fall 2023	Instructor, *Discrete State Stochastic Processes (Math 526)*
Fall 2022	Teaching Assistant, *Fundamental Principles of Calculus*
Fall 2020	Teaching Assistant, *Calculus I*
Spring 2020	Teaching Assistant, *Fundamental Principles of Calculus*
Fall 2019	Teaching Assistant, *Fundamental Principles of Calculus*

Spring 2019	Teaching Assistant, *Calculus III*
Fall 2018	Teaching Assistant, *Fundamental Principles of Calculus*
Spring 2018	Teaching Assistant, *Statistics (Psychology Department)*
Fall 2017	Teaching Assistant, *Calculus II*