

MELİH ÜÇER

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EDUCATION	Bilkent University PhD in Mathematics <i>Thesis:</i> Alexander Modules of Trigonal Curves <i>Advisor:</i> Alex Degtyarev	02/2021
	Massachusetts Institute of Technology Bachelor of Science in Physics	06/2014
EMPLOYMENT	KAUST (King Abdullah University of Science and Technology) Postdoctoral Researcher in the Mean Field Games Group <i>Supervisor:</i> Diogo Gomes	07/2023 – present
	Ankara Yıldırım Beyazıt University Taught Undergraduate Engineering Mathematics	01/2015 – 07/2023
RESEARCH INTERESTS	Mean Field Games, Analysis of Nonlinear PDE, Algebraic Topology	
PAPERS	Existence and Structure for First-Order Time-Dependent Mean-Field Games with Local Couplings Preprint, awarded Best Paper in Dynamic Games: http://arxiv.org/abs/2606.28378 <i>Coauthors:</i> D. Gomes	
	Solving Mean-Field Games with Monotonicity Methods in Banach Spaces Accepted for SIAM Journal of Mathematical Analysis: https://arxiv.org/abs/2506.21212 <i>Coauthors:</i> R. Ferreira, D. Gomes	
	Ranking Mean Field Planning Games Nonlinear Analysis. 274 , 114254 (2027). <i>Coauthors:</i> A. Almadeh, T. Bakaryan, D. Gomes	
	Regularity for Weak Solutions to First-Order Local Mean-Field Games Nonlinear Differ. Equ. Appl. 32 , 99 (2025). <i>Coauthors:</i> A. Alharbi, G. Di Fazio, D. Gomes	
	A Mean-Field Game Model of Price Formation With Price-Dependent Agent Behavior Sao Paulo J. Math. Sci. 18 , 1081-1094 (2024). <i>Coauthors:</i> K. Aljadhai, M. Almarhoumi, D. Gomes	
	On the Alexander invariants of trigonal curves Rev. Mat. Complut. 35 , 265–286 (2022).	
SELECTED INVITED TALKS	21st International Symposium on Dynamic Games and Applications	07/2026
	15th AIMS Conference - Special Session on Mean Field Games	07/2026
	Bolzano Workshop on Mean Field Models and Optimal Control	06/2026

	KAUST Workshop on Analysis and PDEs	04/2025
	Durham Symposium on Mean-Field Games	03/2025
	14th AIMS Conference - Special Session on Mean Field Games	12/2024
	PDMI Rohlin Topology Seminar (online)	11/2020
	Ankara-Istanbul Algebraic Geometry & Number Theory Meetings A series of three talks.	Fall 2019
SELECTED HONORS	Başar-Olsder Award for Best Paper in Dynamic Games Awarded by International Society of Dynamic Games	2026
	Alisbah Best Graduate Student Award Awarded by Bilkent University Mathematics Department.	2020
	Nationwide 1st rank ALES: Turkish Graduate Schools Entrance Exam	Fall 2014
	Mathematical Olympiad Medals Multiple gold, silver, and bronze medals in international, regional, and national olympiads.	2004 – 2010
OUTREACH	Mathematical Olympiad Training Instructor at national training camps (Turkey, Saudi Arabia) and occasional instructor in several other countries (Azerbaijan, Palestine, Iran, UAE). Author of problems for Turkish National Olympiads. Served in Turkish delegation at international olympiads as leader, deputy leader, and observer.	02/2015 – present
	Problem Development for National Examinations (Turkey) Authored mathematics problems for standardized tests including the National University Entrance Exam.	01/2018 – 07/2023