

Yusuf Barış Kartal

CONTACT INFORMATION	School of Mathematics University of Edinburgh Peter Guthrie Tait Road Edinburgh, EH9 3FD United Kingdom	Email: ykartal@ed.ac.uk
FIELDS OF INTEREST	Symplectic topology, mirror symmetry, homotopy theory, non-commutative geometry, algebraic geometry	
EMPLOYMENT	University of Edinburgh, Research associate Princeton University, Instructor of Mathematics	Sept 2022– 2019-2022
EDUCATION	Massachusetts Institute of Technology Ph.D. in Mathematics <ul style="list-style-type: none">• Dissertation topic: Distinguishing open symplectic mapping tori via their wrapped Fukaya categories• Advisor: Paul Seidel• Exchange scholar at Princeton University (Spring 2017) and Columbia University (Fall 2017) Middle East Technical University B.S. in Mathematics <ul style="list-style-type: none">• GPA : 4.00/4.00• Exchange student at UC Berkeley (2012-2013)	2014-2019 2009-2014
PAPERS AND PREPRINTS	Y. B. Kartal, <i>Dynamical invariants of mapping torus categories</i> , Advances in Mathematics 389 (2021) 107882. Y. B. Kartal, <i>Distinguishing open symplectic mapping tori via their wrapped Fukaya categories</i> , Geometry & Topology 25 (2021) 1551-1630. Y. B. Kartal, <i>Iterations of symplectomorphisms and p-adic analytic actions on Fukaya category</i> , submitted, arXiv:2008.08566. L. Côté and Y. B. Kartal, <i>Categorical action filtrations via localization and the filtration growth as a symplectic invariant</i> , Journal für die reine und angewandte Mathematik (Crelles Journal) (2023). Y. B. Kartal, <i>Algebraic sheaves of Floer homology groups via algebraic torus actions on the Fukaya category</i> , arXiv:2109.12256. L. Côté and Y. B. Kartal, <i>Equivariant Floer homotopy via Morse-Bott theory</i> , arXiv:2309.15089.	
EXPOSITORY PAPERS	Y. B. Kartal, <i>A Survey of Singular Reduction</i> , available at https://math.berkeley.edu/~alanw/kartalsurvey.pdf .	
INVITED TALKS	CMSA Mathematical Physics Seminar, Harvard Berkeley Topology Seminar Stanford Symplectic Geometry Seminar Harvard Student/Postdoc Symplectic Geometry Seminar Columbia Symplectic Geometry, Gauge Theory, and Categorification Seminar Informal Seminar at King's College London	Nov 13, 2017 Oct 3, 2018 Oct 8, 2018 Oct 12, 2018 Oct 19, 2018 Oct 23, 2018

	Cambridge Algebraic Geometry Seminar	Oct 24 2018
	IAS/Princeton Symplectic geometry seminar, Princeton	Nov 12, 2018
	CMSA Mathematical Physics Seminar, Harvard	Nov 19 2018
	Stony Brook Symplectic Geometry Seminar	Feb 14, 2019
	USC Geometry&Topology Seminar	Apr 19, 2019
	Current Trends in Symplectic Topology, Montréal	July 11, 2019
	Conference on Fukaya Category and Homological Mirror Symmetry, Beijing	Aug 15, 2019
	Rutgers geometry symmetry and physics seminar (online)	June 11, 2020
	Free Mathematics Seminar (online)	Aug 4, 2020
	UCGEN (Uluslararası Cebirsel Geometri Neşesi) (online)	Aug 26, 2020
	Western Hemisphere Virtual Symplectic Seminar (online)	Oct 23, 2020
	Symplectic Zoominar (CRM-Montréal, Princeton/IAS, Tel Aviv, and Paris) (online)	Feb 5, 2021
	RANT (Representation and Number Theory Seminar) (online, Hong Kong time)	Feb 9, 2021
	EDGE (Edinburg Hodge Seminar) (online)	Apr 28, 2021
	HUJI Topology and geometry seminar (online)	Nov 9, 2021
	USC Topology seminar	Mar 7, 2022
	Recent developments in Lagrangian Floer theory, Simons Center	Mar 16, 2022
	Joint Mathematics Meetings: AMS Special Session on Quantum Categorical Structures in Mirror Symmetry (online)	Apr 6, 2022
	University of Maryland Informal geometric analysis seminar	Apr 26, 2022
	Symplectic versus algebraic geometry, Warwick (online talk)	Jun 1, 2022
	The London geometry and topology seminar	Oct 28, 2022
	EDGE seminar, Edinburgh	Dec 7, 2022
	Yeditepe mathematics seminars (online talk)	Dec 16, 2022
	Feza Gürsey Center for Physics and Mathematics Higher Structures Seminars (online talk)	Feb 21, 2023
	Columbia Symplectic Geometry, Gauge Theory, and Categorification Seminar (online talk)	Apr 21, 2023
	Scottish topology seminar, Aberdeen	May 3, 2023
	Gökova geometry and topology conference, Gökova	Jun 2, 2023
	Bonn symplectic geometry seminar, Bonn	Sept 12, 2023
TEACHING	University of Edinburgh	
	MATH10079 (Group theory, with David Jordan)	Fall 2023
	Princeton University	
	MAT201 (Multivariable calculus)	2019-2020, Spring 2022
	MAT469 (Advanced topology)	Fall 2020
	MAT202 (Linear Algebra)	Spring 2021, Fall 2021
	MIT	
	Recitation instructor for 18.01 (Calculus)	Fall 2016
	Recitation instructor for 18.03 (Differential equations)	Spring 2018
MENTORING	Research Science Institute mentor (high school research program) for Aknazar Kazhymurat	Summer 2018
HONOURS AND AWARDS	Akamai Presidential Graduate Fellowship	2014—2015
	METU highest ranking student of the graduating class	2014
	METU Outstanding Success Scholarship	2009—2014
	TÜBİTAK Turkish Science and Research Council Scholarship	2009—2014

	Türkiye İş Bankası Golden Youth Award, due to success in University Entrance Examination	2009
ORGANIZATIONAL ACTIVITIES	Co-organizer for the Princeton/IAS joint symplectic seminar	2021-2022
	Co-organizer for the Symplectic Zoominar (CRM-Montréal, Princeton/IAS, Tel Aviv, and Paris)	2020-2021
	Organizer for the symplectic preprint seminar (Edinburgh)	Spring 2023
	Co-organizer for the EDGE Geometry Seminar (Edinburgh)	2023-2024
LANGUAGES	Turkish (Native), English (Fluent), Persian (Beginner)	
CITIZENSHIP	Turkey	