

Amalia Culiuc

CONTACT INFORMATION	Georgia Institute of Technology School of Mathematics 686 Cherry st NW Atlanta, Georgia 30313	amalia@math.gatech.edu http://www.math.gatech.edu/~aculiuc3
RESEARCH INTERESTS	Harmonic analysis, weighted inequalities for singular integral operators, sparse estimates, discrete operators.	
EMPLOYMENT	Georgia Institute of Technology, Atlanta, GA Jack K. Hale Visiting Assistant Professor, School of Mathematics August 2016 - present	
EDUCATION	Brown University, Providence RI Ph.D., Mathematics (May 2016) <ul style="list-style-type: none">• Dissertation Title: Weighted estimates of Calderón-Zygmund operators on vector-valued function spaces• Advisor: Sergei Treil M.S. in Mathematics (May 2013) Mount Holyoke College B.A. in Mathematics and Economics (May 2011)	
PAPERS AND PREPRINTS	<i>A sparse domination principle for rough singular integrals</i> , with J. Conde Alonso, F. Di Plinio, and Y. Ou, <i>Analysis and PDE</i> , 10 (2017), no. 5 1255–1284 <i>A sparse estimate for multisublinear forms involving vector-valued maximal functions</i> , with F. Di Plinio and Y. Ou, to appear in <i>Proceedings of the Bruno Pini Mathematical Analysis Seminar</i> (2017) <i>Sparse bounds for the discrete cubic Hilbert transform</i> with R. Kesler and M. Lacey, submitted to <i>Analysis and PDE</i> (2016) <i>Two weight estimates for well localized operators with matrix weights</i> , with K. Bickel, S. Treil, and B. Wick, to appear in <i>Trans. Amer. Math. Soc.</i> (2016). <i>Uniform sparse domination of singular integrals via dyadic shifts</i> , with F. Di Plinio, and Y. Ou, to appear in <i>Math. Res. Lett.</i> (2016). <i>Domination of multilinear singular integrals by positive sparse forms</i> , with F. Di Plinio, and Y. Ou, submitted to <i>Proc. London Math. Soc.</i> (2016). <i>The Carleson Embedding Theorem with matrix weights</i> , with S. Treil, to appear in <i>Int. Math. Res. Not.</i> (2015). <i>A note on two weight bounds for the generalized Hardy-Littlewood maximal operator</i> , (2015).	

INVITED TALKS
AND POSTERS

Spring Mini Courses in Analysis and Geometry, Louisiana State University, Baton Rouge LA (February 2018)

Women in Mathematics Seminar, Georgia Institute of Technology, Atlanta GA (February 2018)

Special session on harmonic analysis and PDE, AMS Spring Central Sectional Meeting, Indiana University in Bloomington, IN (April 2017)

Special session on women in analysis, in honor of Cora Sadosky, Joint Mathematics Meetings, Atlanta GA (January 2017)

Applied analysis seminar, Virginia Tech, Blacksburg VA (November 2016)

Workshop for women in analysis and PDE, AMS Fall Central Sectional Meeting University of St. Thomas, Minneapolis MN (October 2016)

Analysis seminar, Georgia Institute of Technology, Atlanta GA (September 2016)

AMS Southeastern Sectional Meeting, University of Georgia, Athens GA. (March 2016)

Analysis seminar, Brown University, Providence RI. (December 2015)

Analysis seminar, SUNY at Albany, Albany NY. (November 2015)

Analysis seminar, Brown University, Providence RI. (May 2015)

Analysis seminar, Georgia Institute of Technology, Atlanta GA (April 2015)

Informal analysis seminar, Kent State University, Kent OH (March 2015)

Southeastern analysis meeting, University of Georgia, Athens GA (March 2015)

Annual graduate student conference, Brown University, Providence RI (February 2013)

Graduate student seminar, Brown University, Providence RI (December 2012)

EXPOSITORY TALKS

Workshop on sharp inequalities in harmonic analysis, Hausdorff Center, Bonn, Germany. (August 2015)

Internet analysis seminar - Hausdorff geometry and singular integral operators, Georgia Institute of Technology, Atlanta GA (August 2014)

Internet analysis seminar - Multiparameter Harmonic analysis, Georgia Institute of Technology, Atlanta GA (August 2012)

ATTENDED
CONFERENCES

Recent developments in harmonic analysis, MSRI, Berkeley CA. (May 2017)

Introductory workshop: harmonic analysis, MSRI, Berkeley CA. (January 2017)

Workshop for women in analysis and PDE, IMA, University of Minnesota, Minneapolis, MN (June 2015)

Analysis, complex geometry, and mathematical physics: a conference in honor of Duong H. Phong, Columbia University, New York, NY. (May 2013)

CONFERENCE AND SEMINAR LEADERSHIP	2017	AIM workshop co-organizer <i>Sparse domination principles for singular integral operators</i> workshop proposal selected by the AIM scientific board
	2013–2014	Graduate Student Seminar Brown University
	2011	Special Session on Undergraduate Research AMS Eastern Sectional Meeting, Worcester, MA
HONORS AND AWARDS	2018	Class of 1940 Course Survey of Teaching Effectiveness Awards Georgia Institute of Technology
	2017	Thank a Teacher Award Georgia Institute of Technology Center for Teaching and Learning
	2016	Outstanding Teaching Award Brown University Mathematics Department
	2011	Phi Beta Kappa Mount Holyoke College

TEACHING

Georgia Institute of Technology

Spring	2018	Primary instructor, Differential Equations - distance learning
Fall	2017	Primary instructor, Introduction to Probability and Statistics
Fall	2017	Primary instructor, Foundations of Mathematical Proof
Spring	2017	Primary instructor, Integral Calculus
Fall	2016	Primary instructor, Differential Calculus

Brown University

Summer	2017	GirlsGetMath@ICERM organizer
Summer	2016	Summer@Brown STEM II - Open problems in mathematics Primary instructor and content developer
Summer	2016	Summer@Brown STEM I - Intro to cryptography Primary instructor and content developer
Spring	2016	Linear Algebra, Primary instructor
Fall	2015	Multivariable Calculus, Primary instructor
Summer	2015	Summer@Brown pre-college - Math modeling Primary instructor and content developer
Summer	2015	Summer@Brown STEM I - Intro to cryptography Primary instructor and content developer
Summer	2015	GirlsGetMath@ICERM teaching assistant and content developer
Fall	2014	Advanced Placement Calculus, Primary instructor
Summer	2014	GirlsGetMath@ICERM teaching assistant and content developer
Spring	2014	Introductory Calculus II, Primary instructor
Fall	2013	Introductory Calculus I, Primary instructor
Summer	2013	Brown Catalyst program - online course on discrete Markov chains Primary instructor and content developer
Fall	2012	Teaching assistant, Introductory Calculus I

TRAINING	2014	Sheridan Center Teaching Certificate IV Brown University
	2013	Sheridan Center Teaching Certificate I Brown University

REFERENCES

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