

# Stephanie Mui

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CONTACT INFORMATION Courant Institute of Mathematical Sciences (703)242-9891  
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New York, New York 10012 USA

RESEARCH INTERESTS Convex geometry, Geometric analysis, Partial differential equations

EDUCATION **Courant Institute of Mathematical Sciences, New York University**

Ph.D. Candidate, Mathematics, Sep 2017 - present

- Dissertation Topic: Convex Geometry (Minkowski Problems)
- Advisor: Deane Yang and Gaoyong Zhang

**George Mason University**

M.S. in Mathematics, May 2017

- Thesis Topic: Nash-Kuiper Surfaces
- Advisor: Sean Lawton

B.A. in Mathematics, May 2016

- Summa cum laude

PUBLICATIONS S. Mui, *On the  $L^p$  dual Minkowski problem for  $-1 < p < 0$* , in preparation (2022).

S. Mui, *On the  $L^p$  Aleksandrov problem for negative  $p$* , Adv. Math. **408** (2022).

INVITED TALKS *Title TBD*, AMS Southeastern Sectional Meeting: Special Session on High-dimensional Convexity and Probability, Georgia Tech. (March 2023)

*On the  $L^p$  dual Minkowski problem for  $-1 < p < 0$* , Harmonic Analysis Methods in Geometric Tomography, ICERM. (September 2022)

*On the  $L^p$  dual Minkowski problem for  $-1 < p < 0$* , Canadian Math Society Summer Meeting: Session on Convex geometry and Partial Differential Equations, Memorial University of Newfoundland. (June 2022)

*On the  $L^p$  Aleksandrov problem for negative  $p$* , Workshop in Convexity and High-dimensional probability, Georgia Tech, Short talk. (May 2022)

*On the  $L^p$  Aleksandrov problem for negative  $p$* , Online Asymptotic Geometric Analysis Seminar. (March 2022)

*On the  $L^p$  Aleksandrov problem for negative  $p$* , Convex Geometry and its Applications, Oberwolfach Research Institute for Mathematics (MFO). (December 2021)

*$C^1$  Isometric embedding of a flat torus in 3D Euclidean space and Visualization of the Nash-Kuiper Sphere*, Geometry Labs United Conference, ICERM, Lightning talk and poster. (July 2020)

*Isometric embedding of a flat torus in 3D Euclidean space*, Undergraduate Mathematics

Symposium, University of Illinois at Chicago. (October 2016)

TEACHING EXPERIENCE	Fall	2022	Teaching Assistant (NYU), Analysis
	Spring	2022	Teaching Assistant (NYU), Honors Analysis I and II
	Fall	2021	Teaching Assistant (NYU), Analysis
	Spring	2021	Teaching Assistant (NYU), Analysis
	Spring	2017	Teaching Assistant (GMU), Calculus I
SERVICE	2022+		Referee for Journal of Differential Geometry
	2020–2021		Mentor for NYU Mathematics Master’s Students for Aadya Bhatnagar and Zachary Brogie
	2015–2017		Research Intern at the Mason Experimental Geometry Lab Volunteered for outreach activities hosted by lab
HONORS AND AWARDS	2021		US Junior Oberwolfach Fellow Oberwolfach Research Institute for Mathematics (MFO)
	2018–2020		Summer Opportunity Fellowship New York University Graduate School of Arts and Sciences
	2017–2022		Henry MacCracken Fellowship New York University Graduate School of Arts and Sciences
	2016		First Place AMS Menger Award
			Intel International Science and Engineering Fair