

# 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

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