

Personal Information

Email: jdu8@uic.edu
Citizenship: USA

Doctoral Thesis

Title: Scales, Diamond and the Strong Tree Property
Advisor: Dima Sinapova
Committee: Dima Sinapova, James Cummings, David Marker, John Baldwin, Sherwood Hachtman

Education

- 2018 **Ph.D., Mathematics**, *University of Illinois at Chicago*, Chicago.
- 2011 **MS, Mathematics**, *California Institute of Technology*, Pasadena.
- 2008 **BS, Mathematics (Magna Cum Laude)**, *University of California Los Angeles*, Los Angeles.

Research Interests

Mathematical logic: Large cardinals, forcing, singular combinatorics and descriptive set theory.

Papers and Preprints

DU, J., *The Strong Tree Property and Failure of SCH at the Successor of a Singular*, Submitted.
DU, J., *Diamond, Scales and GCH down to \aleph_{ω^2}* , Published in Archive for Mathematical Logic:
<https://doi.org/10.1007/s00153-018-0633-4>

Talks

- Oct 2018 AMS Special Session: Large Cardinals and Combinatorial Set Theory *U Michigan*
- April 2018 Grad Student Conference in Logic *UW Madison*
- Jan 2018 AMS Contributed Paper Session on Logic and Set Theory *San Diego*
- Sept 2017 UIC Logic Seminar *UIC*
- April 2017 Grad Student Conference in Logic *UIUC*
- Sept 2016 Set Theory Seminar *UIC*

Conferences

- Fall 2018 AMS Sectional Meeting *U Michigan*
- Summer 2018 Appalachian Set Theory Workshop *CMU*
- Spring 2018 Grad Student Conference in Logic *UW Madison*

Spring 2018	Joint Mathematics Meeting	<i>San Diego</i>
Spring 2017	Grad Student Conference in Logic	<i>UIUC</i>
Spring 2017	Very Informal Gathering	<i>UCLA</i>
Spring 2017	Appalachian Set Theory Workshop	<i>CMU</i>
Fall 2016	Set theory workshop	<i>UIC</i>
Summer 2016	Graduate summer school in set theory	<i>UCI</i>
Spring 2016	Appalachian Set Theory Workshop	<i>VCU</i>
Fall 2015	19th Midrasha Mathematicae	<i>Hebrew University of Jerusalem</i>
Summer 2015	Graduate summer school in set theory	<i>UCI</i>
Spring 2015	Appalachian Set Theory Workshop	<i>CMU</i>
Spring 2015	North American Meeting of the Association for Symbolic Logic	<i>UIUC</i>
Fall 2014	Appalachian Set Theory Workshop	<i>UIC</i>
Spring 2014	North American Meeting of the Association for Symbolic Logic	<i>CU Boulder</i>
Spring 2013	Grad Student Conference in Logic	<i>UIUC</i>

Honors and Awards

- o Joint Mathematics Meeting 2018 Travel Award, \$500
- o ASL travel award 2014, \$300
- o UCLA Department of Mathematics Highest Honors

Teaching Experience

2012-2016	UIC	<i>TA</i>
Courses: Precalculus Mathematics, Calculus for Business, Calculus I, Calculus II, Calculus III		
2008-2010	Caltech	<i>TA</i>
Courses: Calculus of One Variable, Linear Algebra, Calculus of Several Variables		

Teaching-Related Experience

2016-2017	UIC	<i>Course Grader</i>
Courses: Applied Linear Algebra, Linear Algebra I, Computer Algorithms I		
2013	UIC	<i>Math Learning Center Tutor</i>

Math Outreach Activities

- Numerous Undergraduate Math Club Talk times
- Fall 2013 Volunteer Judge for QED Youth Math Symposium