

# Dylan Wilson

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CONTACT INFORMATION	Department of Mathematics University of Chicago 5724 S. University Avenue, Room 208C Chicago, IL 60637, USA	<code>dwilson@math.uchicago.edu</code>
RESEARCH INTERESTS	Various incarnations of homotopy theory: chromatic, equivariant, and motivic, and their intersections.	
EDUCATION	<b>Northwestern University</b> Ph.D. Mathematics, June 2017 Advisor: Paul Goerss  <b>University of Washington</b> B.S. in Mathematics, June 2012 Advisor: Julia Pevtsova	
EMPLOYMENT	<b>University of Chicago</b> Dickson RTG Instructor, September 2017-present	
PAPERS	<i>The odd primary equivariant dual Steenrod algebra.</i> With Krishanu Sankar. In preparation.  <i>Quotients of even rings.</i> With Jeremy Hahn. Preprint. <a href="#">arXiv:1809.04723</a> .  <i>Eilenberg-MacLane spectra as equivariant Thom spectra.</i> With Jeremy Hahn. Submitted. <a href="#">arXiv:1804.05292</a> .  <i>On categories of slices.</i> Preprint. <a href="#">arXiv:1711.03472</a> .  <i>A <math>C_2</math>-equivariant analog of Mahowald's Thom spectrum theorem.</i> With Mark Behrens. To appear in Proceedings of the American Mathematical Society. <a href="#">arXiv:1707.02582</a> .  <i>Power operations for <math>\mathbf{HF}_2</math> and a cellular construction of BPR.</i> Submitted. <a href="#">arXiv:1611.06958</a> .  <i>Orientations and topological modular forms with level structure.</i> Preprint. <a href="#">arXiv:1507.05116</a> .	
RESEARCH FUNDING	National Science Foundation Graduate Research Fellowship 2012-2017	
INVITED TALKS	<i>TBA.</i> University of British-Columbia. (February 2019)  <i>Complex conjugation at odd primes.</i> Massachusetts Institute of Technology. (October 2018)  <i>Eilenberg-MacLane spectra as equivariant Thom spectra.</i> Notre Dame. (May 2018)	

*Eilenberg-MacLane spectra as equivariant Thom spectra.* University of Rochester. (April 2018)

*Eilenberg-MacLane spectra as equivariant Thom spectra.* University of Minnesota. (April 2018)

*Slice spheres in equivariant and chromatic homotopy theory.* Massachusetts Institute of Technology. (October 2017)

*Kervaire invariants, even spaces, and equivariant power operations.* University of California, Los Angeles. (January 2017)

*Equivariant power operations and analogs of BP.* University of Chicago. (November 2016)

*Kervaire invariants, even spaces, and equivariant power operations.* Purdue University. (October 2016)

*Orienting  $tmf$  with level structure.* University of Illinois Urbana-Champaign. (March 2016)

*Orienting  $tmf$  with level structure.* Notre Dame. (December 2015)

*Orienting  $tmf$  with level structure.* University of Virginia. (October 2015)

*Orienting  $tmf$  with level structure.* University of Minnesota. (April 2015)

*Cobordism, vector bundles, and group laws,* Young Topologists Meeting, Center for Symmetry and Deformation, Copenhagen. (July 2014)

CONTRIBUTED  
TALKS

*Equivariant K-theory.* Chicago Summer School in Geometry and Topology. (Summer 2016)

*From cobordism to K-theory.* Chicago Summer School in Geometry and Topology. (Summer 2016)

*Browder's work on the Kervaire invariant.* Pre-Talbot Seminar. (Spring 2016)

*Homotopy colimits and universal constructions.* Pre-Talbot Seminar. (Spring 2016)

*An overview of abstract homotopy theory.* Pre-Talbot Seminar. (Spring 2016)

*Rational homotopy theory I.* Pre-Talbot Seminar. (Spring 2015)

K3 Surfaces Seminar, Northwestern (Fall 2014)

*Toric Varieties and Pick's Theorem,* Graduate Student Seminar. (Spring 2014)

*Proof of Hoyois-Hopkins-Morel Theorem,* Talbot Workshop. (March 2014)

*Algebraic Geometry Examples and Computations,* Pre-Talbot Workshop. (February 2014)

*Sheaves of Spectra and Lurie's Theorem,* Seminar on Topological Automorphic Forms,

Northwestern. (Winter 2013)

*The Dwyer-Weiss-Williams Index Theorem*, Kan seminar, Northwestern. (Fall 2013)

*The Chromatic Spectral Sequence and the Adams-Novikov  $E_2$ -term*, Pre-Talbot Seminar, Northwestern. (March 2013)

$\infty$ -categories: *Tip of the iceberg, dip of the toe*, Thom spectra seminar, Northwestern. (Spring 2013)

*Thom spectra that are Eilenberg-MacLane spectra*, Seminar on elliptic cohomology, Northwestern. (Winter 2012)

*The action of the mapping class group on Teichmüller space*, Seminar on Teichmüller Theory, Northwestern. (Fall 2012)

TEACHING AND OUTREACH	Jan-Jun	2019	Instructor, Abstract Linear Algebra
	Spring	2018	Instructor, Abstract Linear Algebra
	Winter	2018	Instructor, Introduction to Proofs
	Fall	2017	Instructor, Accelerated Analysis
	Fall	2016	Instructor, Differential Calculus
	Sept-June	2012-2017	Volunteer Mentor at Evanston Math Circle
	Aug-Sep	2016	Lead TA, Bridge program
	Fall	2015	Teaching Assistant, Honors Abstract Algebra
	Aug-Sep	2015	Lead TA, Bridge program
	Fall	2014	Teaching Assistant, Linear Algebra
	Aug-Sep	2014	Teaching Assistant, Bridge Program
	Fall	2013	Teaching Assistant, Differential Geometry
	Aug-Sep	2013	Teaching Assistant, Bridge Program
	Sept-June	2010-2012	Co-Coordinator University of Washington Math Circle
	Summer	2011-2012	TA and Counselor Summer Institute for Mathematics at UW
	ORGANIZATION	2017–	
2018			Chromatic Homotopy Theory: Journey to the Frontier Co-organizer
2015-2017			Northwestern topology seminar Co-organizer
2014- 2017			Talbot workshop Co-organizer
2016			Chicago Summer School in Geometry and Topology Co-organizer
2016			Winter Midwest Topology Seminar Co-organizer
HONORS AND AWARDS	2016		Bridge Teaching Assistant Award
	2015		Gelfand Award <i>For outstanding contribution to the department</i>
	2015		Bridge Teaching Assistant Award <i>Northwestern University</i>
	2011		Gullicksen Award in Mathematics <i>University of Washington</i>
REFERENCES	<b>Paul Goerss</b> (advisor), Northwestern University, <a href="mailto:pgoerss@math.northwestern.edu">pgoerss@math.northwestern.edu</a>		
	<b>Mark Behrens</b> , University of Notre Dame, <a href="mailto:mbehren1@nd.edu">mbehren1@nd.edu</a>		
	<b>Mike Hill</b> , University of California, Los Angeles, <a href="mailto:mikehill@math.ucla.edu">mikehill@math.ucla.edu</a>		
	<b>Peter May</b> , University of Chicago, <a href="mailto:may@math.uchicago.edu">may@math.uchicago.edu</a>		
	<b>Madhav Nori</b> (teaching), University of Chicago, <a href="mailto:nori@math.uchicago.edu">nori@math.uchicago.edu</a>		
	<b>Eric Zaslow</b> (teaching), Northwestern University, <a href="mailto:zaslow@math.northwestern.edu">zaslow@math.northwestern.edu</a>		