Curriculum Vitae - Chris Skalit

Personal Details

Address: University of Illinois at Chicago
Department of Mathematics
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Research Area

K-Theory and Intersection Theory in Mixed Characteristic, Algebraic Geometry, Homological Conjectures in Commutative Algebra

Education

University of Chicago (2009-2015)

Ph.D. Mathematics, June 2015.
Ph.D. Advisor: Madhav Nori.
M.Sc. Mathematics, June 2011.

Rutgers University (2005-2009)

B.Sc. Mathematics, May 2009.

Appointments

2015 - Present: RTG Research Assistant Professor, University of Illinois at Chicago.

Papers and Preprints

1. *Regular Morphisms and Gersten's Conjecture.* arXiv:1710.00303, 2017.

2. *Koszul Factorization and the Cohen-Gabber Theorem.* Illinois J. Math., 60(3-4):833844, arXiv:1610.01264, 2017.

3. *Positivity of Intersection Multiplicity Over a Two-Dimensional Base.* arXiv:1510.05146, 2015.

4. *Intersection Multiplicity of Serre in the Unramified Case.* J. Algebra 428 91-121, arXiv:1409.3616, 2015.

Awards, Honors, and Fellowships

McCormick Fellowship, University of Chicago, 2010-2012.
GAANN Fellowship, 2009-2010.

Invited Talks

Commutative Algebra Seminar, University of Nebraska, April 2017: *"The Claborn-Fossum Conjecture and the Gersten Complex."*

Commutative Algebra Seminar, University of Utah, March 2017: *"The Claborn-Fossum Conjecture and the Gersten Complex."*

Commutative Algebra Symposium, International Conference of The Indian Mathematics Consortium, Banaras Hindu University (Varanasi, India). December 2016: *"Intersection Multiplicity Over a Two-Dimensional Base."*

Algebra Seminar, Georgia State University, March 2016: *"Intersection Multiplicity over a Two-Dimensional Base."*

Algebraic Geometry Seminar, Princeton University, March 2016: *"Intersection Multiplicity over a Two-Dimensional Base."*

Algebraic Geometry Seminar, Purdue University, September 2015: *"Intersection Multiplicity and Transversality in Unramified Regular Local Rings."*

Commutative Algebra and Related Topics, University of Kansas, March 2015: *"Intersection Multiplicity of Serre in the Unramified Case."*

Algebraic Geometry Seminar, University of Illinois at Chicago, October 2014: *"Intersection Multiplicity of Serre in the Unramified Case."*

Commutative Algebra/Algebraic Geometry Seminar, University of Illinois at Urbana-Champaign, November 2013: *"Intersection Multiplicity of Serre in the Unramified Case."*

Service

Co-Organizer, Workshop on The Homological Conjectures in Commutative Algebra, University of Illinois at Chicago, November 18-20, 2016.

Co-Organizer, REU in Commutative Algebra, University of Illinois at Chicago, May 23-June 4, 2016.

Ph.D. Thesis Committee Member, Xudong Zheng: *The Hilbert Schemes of Points on Singular Varieties and Kodaira Non-Vanishing in Characteristic p*, May 2016.

Organizer, Reading Group on Neron Popescu Desingularization, University of Illinois at Chicago, Fall 2015-Spring 2016.

Co-Organizer/Speaker, Graduate Student Study Group on Motivic Cohomology, University of Chicago, Spring/Summer 2014.

Mentor, Research Experience for Undergraduates, University of Chicago, Summer 2013:
Yujia Pan — "*The Erdös-Szekeres theorem: a geometric application of Ramsey's theorem.*"

Co-Organizer/Speaker, Graduate Student Study Group on Higher Algebraic K-Theory, University of Chicago, Winter 2013.

Speaker, Warm-up Program for Entering Graduate Students, University of Chicago, September 2012.

Organizer/Speaker, Graduate Student Study Group on Fulton-MacPherson Intersection Theory, University of Chicago, Winter/Spring 2012.

Speaker, Warm-up Program for Entering Graduate Students, University of Chicago, September 2011.

Conferences Attended

KUMUNU 2017, University of Kansas, October 21-22, 2017.

Local Cohomology in Commutative Algebra and Algebraic Geometry, University of Minnesota, August 7-11, 2017.

KUMUNU 2016, University of Kansas, October 1-2, 2016.

Commutative Algebra and Its Interactions with Algebraic Geometry (in honor of Craig Hunekes Birthday), University of Michigan, July 7-12, 2016.

Midwest Commutative Algebra and Algebraic Geometry Conference: A Meeting in Honor of Juan Migliore, University of Notre Dame, May 16-19, 2016.

A Conference in Honor of Lawrence Ein's 60th Birthday: Local and Global Methods in Algebraic Geometry, University of Illinois at Chicago, May 12-15, 2016.

Midwest Commutative Algebra Conference, Purdue University, August 3-7, 2015.

K-Theory and Representation Theory Conference in Honor of Eric Friedlander's 70th Birthday, University of Southern California, May 19-22, 2014.

Workshop on Projective Modules and A^1-Homotopy Theory, American Institute of Mathematics, Palo Alto, CA, May 5-9, 2014.

Homotopical Methods in Algebraic Geometry Conference, University of Southern California, May 28 - June 1, 2013.

Clay Math Workshop on Resolution of Singularities, Obergurgl, Austria, June 3-30, 2012.

Commutative Algebra and Algebraic Geometry Conference, University of Illinois at Urbana-Champaign, November 4-6, 2011.

Teaching Experience

Calculus III, University of Illinois at Chicago, Fall 2017.

Calculus III, University of Illinois at Chicago, Spring 2017.

Commutative and Homological Algebra, University of Illinois at Chicago, Fall 2016.

Applied Linear Algebra, University of Illinois at Chicago, Fall 2015-Spring 2016.

Inquiry-Based Honors Calculus I-III (Co-Instructor), University of Chicago, Fall 2014 - Spring 2015.

Linear Algebra, University of Chicago, Winter 2014.

Mathematical Methods for the Social Sciences, University of Chicago, Fall 2013.

Calculus I-III, University of Chicago, Fall 2012 - Spring 2013.

Calculus I-III, University of Chicago, Fall 2011 - Spring 2012.

Honors Algebra I-III (Teaching Assistant), University of Chicago, Fall 2010 - Spring 2011.