

# Curriculum Vitae

Christian Haesemeyer

**Research Interests:** Algebraic geometry and algebraic topology; in particular, algebraic K-theory and Hochschild homology of singularities, and algebraic cycles.

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## Education:

- Ph.D. in Mathematics, Northwestern University, June 2003 (advisor(s): Andrei A. Suslin and Eric M. Friedlander, thesis title: *Descent properties for homotopy K-theory*)
- Diploma in Mathematics, Bonn University, 1999

## Papers and Preprints:

- Norm varieties and the Chain Lemma (after Markus Rost), with C. Weibel. Preprint 2008, submitted.
- Bass'  $NK$  groups and  $cdh$ -fibrant Hochschild homology, with G. Cortiñas, M. E. Walker and C. Weibel. Preprint 2008, submitted.
- The K-theory of toric varieties, with G. Cortiñas, M. E. Walker and C. Weibel, *Trans. AMS*, to appear.
- Infinitesimal K-theory and the Chern character to negative cyclic homology, with G. Cortiñas and C. Weibel. Preprint 2007, submitted.
- K-regularity,  $cdh$ -fibrant Hochschild homology, and a conjecture of Vorst, with G. Cortiñas and C. Weibel. *Journal of the AMS*, 21(2):547–561, 2008.
- Cyclic homology,  $cdh$ -cohomology and negative K-theory, with G. Cortiñas, M. Schlichting and C. Weibel. *Annals of Math.* 167(2):549–573, 2008.

- Motives and étale motives with finite coefficients, with J. Hornbostel, *K-Theory* 34 No. 3, 2005.
- Descent properties of homotopy K-theory, *Duke Math. J.* 125(3):589-619 (2004).
- Techniques, computations and conjectures for semitopological K-theory, with E. M. Friedlander and M. E. Walker, *Math. Ann.* 330:759-807 (2004).

**Employment:**

- Assoc. Professor at the University of California Los Angeles, 2008-
- Asst. Professor (tenure track) at the University of Illinois at Chicago, 2007-2008
- J.L. Doob Assistant Professor at the University of Illinois, Urbana-Champaign, 2005-2007.
- Member, Institute for Advanced Study, 2004-2005.
- Postdoc, University Paris 7, summer 2004.
- J.L. Doob Assistant Professor at the University of Illinois, Urbana-Champaign, 2003-2004.
- Clay Liftoff Fellow, summer 2003.
- Essen University, spring 2003.

**Presentations (Conferences):**

- Midwest topology meeting, Evanston (IL), May 2008.
- Conference on Algebraic Cycles, Columbus (OH), March 2008.
- Meeting on Algebraic K-theory, Oberwolfach, July 2006.
- Great Lakes K-theory Conference XI, Chicago, April 2006.
- Conference on Algebraic  $K$ -theory and its Applications, Safi, Morocco, July 2004.
- Workshop on Motivic Homotopy Theory, IHP Paris, May 2004.

- Great Lakes K-theory Conference X, Urbana-Champaign, May 2004.
- Meeting on Algebraic K-theory, Oberwolfach, August 2002.

**Presentations (Seminars):**

- Colloquium, University of Illinois at Chicago, February 2008.
- Algebra Seminar and Colloquium, USC, October 2007.
- Algebra Seminar, UCLA, May 2006.
- Algebra Seminar, Northwestern University, February 2006.
- Topology Seminar, UIUC, fall 2005.
- Algebra, Geometry and Physics Seminar, Stony Brook University-SUNY, July 2005.
- *K*-theory Seminar, Ohio State University, April 2005.
- Joint Algebra/Topology Seminar, University of Oregon, March 2005.
- Algebra Seminar, Rutgers University, February 2005.
- Geometry-Algebra-Singularities-Combinatorics seminar, Northeastern University, November 2004.
- Topology Seminar, UIUC, fall 2003.
- Essen University, June 2003.
- Motivic Cohomology Seminar, University of Illinois at Urbana-Champaign, November 2002.
- Algebra Seminar, Northwestern University, November 2002.
- Topology Seminar, University of Heidelberg, July 2001.

**Scholarships and Awards:**

- NSF grant DMS-0652860, 2007-2010.
- Clay Math Institute Liftoff Fellowship, Summer 2003.
- Helen M. Galvin Fellowship of the Graduate School of Northwestern University, 2002-2003.

- Northwestern University Teaching Assistantship, 2000-2002.
- Northwestern University Fellowship, 1999-2000.
- Fellow of the German National Merit Foundation, 1994-1998.

**Professional Activities:** I served as guest editor for a special issue of the Journal of Pure and Applied Algebra.

I have refereed, among other journals, for *Trans. AMS*, *Compositio Math.*, *American Journal of Math.*, and *Math. Ann.*.

I am a reviewer for MathSciNet.

I co-organized the following conferences and seminars:

- Session on Algebraic K-theory and Nil groups in algebra and topology, AMS sectional meeting, Bloomington (IN) 2008.
- Session on K-theory and algebraic cycles, AMS sectional meeting, Lincoln (NE) 2005.
- Conference on algebraic cycles, K-theory and modular representation theory, Evanston (IL) 2004.
- Motivic cohomology seminar, University of Illinois, Urbana-Champaign (IL), 2003-2004 and 2005-2006.

**Teaching Experience:**

- Courses taught at the University of Illinois at Chicago: Algebraic Topology (graduate), Abstract Algebra (undergraduate).
- At the University of Illinois, Urbana-Champaign: Multivariable Calculus, Vector Calculus, Introduction to Abstract Algebra (twice), Etale Cohomology, Cohomology of algebraic varieties and classical motives, Linear Algebra.
- At Northwestern University: Discussion sections for various classes, including Calculus, Game Theory, Linear Algebra, Fundamental Mathematics.
- At Bonn University: Discussion sections for various classes, including Real Analysis, Algebra, Representation Theory of Lie Groups, Algebraic Number Theory.