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EDUCATION

· **Ph.D. Mathematics**, Northwestern University, June, 2003, Advisor: Paul G. Goerss.
Thesis: *The Lubin-Tate Spectrum and its Homotopy Fixed Point Spectra* (106 pp.).
· **M.S. Mathematics**, University of Illinois, Urbana-Champaign, May, 1997.
Ph.D. program, 1995 - 1999. Advisor: Randy McCarthy.
· Austin Peay State University, 1994 - 1995, studied mathematics, German, philosophy.
· **B.A. Mathematics**, *summa cum laude*, Vanderbilt University, 1990 - 1994.
Phi Beta Kappa; College Scholar, 1990 - 1994.

EMPLOYMENT

· **Assistant Professor**, University of Louisiana at Lafayette, August, 2007 - present.
Graduate Courses Taught: Advanced Topics in General Topology I (Algebraic Varieties), II (Sheaves and Cohomology); Topology I (twice), II (twice); Algebraic Topology I, II; Commutative Algebra (reading course); Seminar in Category Theory.
Undergraduate Courses Taught: Vector Analysis, Introduction to Topology, Elementary Linear Algebra (twice), Survey of Calculus (7 times), Calculus I (twice), II (three times), III.
· **Visiting Scholar**, Rice University, July - December, 2008.
· **Visiting Assistant Professor**, Wesleyan University, September, 2006 - June, 2007.
Courses Taught: Algebraic Topology (2nd semester of the first-year graduate course in topology), Differential Equations, Elementary Linear Algebra (two times).
· **VIGRE Research Assistant Professor**, Purdue University, August, 2003 - May, 2006.
Courses Taught: Real Analysis; Vector Calculus for Master's degree students in engineering; Abstract Algebra (four times; two different textbooks); Calculus III for advanced freshmen - an honors course for engineering students (two times).
· **Visiting Scholar**, University of Notre Dame, June - December, 2005, in association with Bill Dwyer.
· **Teaching Assistant**, Northwestern University, September, 1999 - June, 2003.
Courses Assisted with: Introduction to Modern Algebra, Linear Algebra for Applications, Accelerated Mathematics: First Year, Multiple Integration and Vector Calculus, Calculus II/III for social sciences and economics, Calculus I - III, Survey of Modern Mathematics I and II.
· **Instructor**, Northwestern University Summer School, Summer 2000. *Course Taught:* Calculus III.
· **Teaching Assistant**, University of Illinois, Urbana-Champaign, 1995 - 1999.
Full Responsibility Instructor: Multiple Integration and Vector Calculus, Calculus II/III for social sciences and economics, Calculus II (three times), Finite Mathematics, Numeracy.
Assisted with: Calculus I (two sections).

PUBLICATIONS AND SUBMISSIONS IN PEER-REVIEWED JOURNALS

· Homotopy fixed points for $L_{K(n)}(E_n \wedge X)$ using the continuous action, *Journal of Pure and Applied Algebra,* 206(3): 322–354, 2006.
· The E_2-term of the descent spectral sequence for continuous G-spectra, *New York Journal of Mathematics,* 12 (2006), 183–191. Published at http://nyjm.albany.edu/j/2006/12-11.html.
· Explicit fibrant replacement for discrete G-spectra, *Homology, Homotopy and Applications,* 10(3): 137–150, 2008.

(Publications and submissions, continued)

- Epimorphic covers make R_G^+ a site, for profinite G, *Theory and Applications of Categories,* Vol. 22, No. 16: 388–400, 2009.
- Iterated homotopy fixed points for the Lubin-Tate spectrum (with an Appendix, by D. G. Davis and Ben Wieland, titled An example of a discrete G-spectrum that is not hyperfibrant), *Topology and its Applications,* 156(17): 2881–2898, 2009.
- The homotopy fixed point spectra of profinite Galois extensions, joint with Mark Behrens, *Transactions of the American Mathematical Society,* 362(9): 4983–5042, 2010.
- Obtaining intermediate rings of a local profinite Galois extension without localization, *Journal of Homotopy and Related Structures,* 5(1): 253–268, 2010.
- Delta-discrete G-spectra and iterated homotopy fixed points, *Algebraic & Geometric Topology,* 11(5): 2775-2814, 2011.
- Function spectra and continuous G–spectra, *Bulletin of the London Mathematical Society,* 43(6): 1141-1150, December, 2011.
- Every $K(n)$-local spectrum is the homotopy fixed points of its Morava module, joint with Takeshi Torii, *Proceedings of the American Mathematical Society,* 140(3): 1097-1103, 2012.
- A descent spectral sequence for arbitrary $K(n)$–local spectra with explicit E_2–term, joint with Tyler Lawson, accepted for publication on 1/17/13 in *Glasgow Mathematical Journal,* 11 pages, available online at the arXiv: math.AT/1209.2105.
- Commutative ring objects in pro-categories and generalized Moore spectra, joint with Tyler Lawson, submitted on 8/22/12 to *Geometry & Topology,* 43 pages, available online at the arXiv: math.AT/1208.4519.
- The homotopy orbit spectrum for profinite groups, submitted on 8/8/06 to *Homology, Homotopy and Applications,* received favorable referee's report, under revision, 13 pages, available online at the arXiv: math.AT/0608262.

PAPERS IN PREPARATION (and current length)

- Rognes's theory of Galois extensions and the continuous action of G_n on E_n, preprint, 14 pages, May, 2004, available online at the arXiv: math.AT/0611943.
- Consecutive chromatic layers and the continuous action of the Morava stabilizer group, joint with Takeshi Torii, 31 pages.
- Morava E–theory, pro-spectra, and homotopy fixed points, joint with Tyler Lawson, 28 pages.
- Realizing $L_{K(n)}L_{K(n+1)}(X)$ for finite complexes by using sequentially continuous (G, H)-spectra, joint with Takeshi Torii, 25 pages.
- Discrete and profinite spectra and iterated homotopy fixed points, joint with Gereon Quick, 20 pages.
- Comparing descent and Adams-type spectral sequences for consecutive chromatic layers, joint with Takeshi Torii, 4 pages.
- $E(n)$-torsion spectra and the tower of generalized Moore spectra, joint with Takeshi Torii, 2 pages.
- A universal coefficient spectral sequence for discrete G-spectra, 28 pages.
- On the mapping telescope of the mod (p, v_1) homotopy of the algebraic K-theory of p-adic complex K-theory, 16 pages.
- Continuous G-spectra and Brown-Comenetz duality, 15 pages.
- A homotopy theory for continuous G-spectra, 7 pages.
- A new descent spectral sequence for the $K(n)$-local sphere, 14 pages.
- Using Postnikov towers for iterated homotopy fixed points of discrete G-spectra, 13 pages.
- A Lyndon-Hochschild-Serre-type spectral sequence for arbitrary discrete G–spectra, 10 pages.
- Homotopy fixed points for profinite groups are the co-stepwise contextual emulator of discrete homotopy fixed points, 11 pages.
- Smashing together various homotopy fixed points of the Lubin-Tate spectrum, 6 pages.
- Some examples of totally hyperfibrant discrete G-spectra, 4 pages.

RESEARCH-RELATED ACTIVITIES, SERVICE TO THE PROFESSION, AND AWARDS

· Summer Research Award from the College of Science of the University of Louisiana at Lafayette, Summer, 2012.
· Member of Organizing Committee for the NSF/CBMS Regional Conference in the Mathematical Sciences, "Topological and algebraic regularity properties of nuclear C^*–algebras," May 11–15, 2012, University of Louisiana at Lafayette.
· In 2011, 2012, I did refereeing work for the journal *Homology, Homotopy and Applications*.
· In Summer 2012, for four weeks, Ph.D. student Chris Ryan received funding from me for his research.
· In Summers 2009, 2010, 2011, Ph.D. student Chris Ryan was my graduate assistant; each summer he received financial support from my Board of Regents grant.
· Reviewer for Zentralblatt, October, 2010 – present.
· Editor, *Journal of Homotopy and Related Structures*, October, 2005 – present.
· Awarded a 3-year RCS grant (for a total of $34,719) from the Louisiana Board of Regents; project title: "Homotopy fixed points and chromatic homotopy theory;" June, 2008 – June, 2012 (had a no-cost extension for the 4th year).
· Gave talks on a variety of topics in the Topology Seminar at the University of Louisiana at Lafayette: 3 talks in Spring, 2008; 2 talks in Fall, 2008; 4 talks in Spring, 2009; 2 talks in Fall, 2009; 4 talks in Spring, 2010; 2 talks in Fall, 2010; 1 talk in Spring, 2011; 4 talks in Fall, 2011; 1 talk in Spring, 2012; 3 talks in Fall, 2012.
· Member of Organizing Committee for the Lloyd Roeling UL Lafayette Mathematics Conference (in topology), October, 2009; in charge of use of technology by the speakers.
· Organizer of Topology Seminar, Univ. of Louisiana at Lafayette: Spring, 2008; Spring, 2009; Spring, 2010.
· Summer Research Award from the College of Science of the University of Louisiana at Lafayette, two months, Summer, 2008.
· Invited and hosted the following outside speakers in the UL Topology Seminar (the speaker's affiliation at the time of the talk is in parentheses): Shaun Ault (Valdosta State University), Niles Johnson (University of Georgia), Mara Neusel (Texas Tech), Duane Randall (Loyola University, New Orleans), Yuli Rudyak (University of Florida), Marco Schlichting (Louisiana State University), Girja Shanker Tripathi (Louisiana State University).
· Gave two hour-long talks in the mini-seminar "Stacks and Homotopy Theory" (at UL), March 14, 2009 and March 28, 2009.
· Worked on my research while visiting the Rice University Math Department, two weeks, Summer, 2008.
· Participation in *Algebraic Topology* program at the Mittag-Leffler Institute, Djursholm, Sweden, January 15 – February 15, 2006.

TALKS

· *A Lyndon-Hochschild-Serre-type spectral sequence for discrete G–spectra,* 10-minute talk, at the conference "Structured Ring Spectra – TNG," Hamburg, Germany, August 4, 2011.
· *Arbitrary I-adically complete spectra and continuous group cohomology,* Algebra Seminar, Tulane University, February 23, 2011.
· *Arbitrary Morava modules, their Adams spectral sequence, and continuous group cohomology,* Colloquium, University of Louisiana at Lafayette, February 10, 2011.
· *Using Postnikov towers to form iterated homotopy fixed point spectra,* 45-minute talk, in the AMS Special Session on Homotopy Theory and Algebraic Topology, Huntsville, October 25, 2008.
· *Galois theory, commutative rings, and chromatic homotopy theory,* Colloquium, University of Louisiana at Lafayette, April 24, 2008.
· *Fixed points in group cohomology, topological algebra, and homotopy theory*
  · Colloquium, University of Louisiana at Lafayette, March 15, 2007.
  · Colloquium, Wesleyan University, February 22, 2007.
· *Algebraic structures, continuous cohomology, and point-set Morava modules,* Algebra Seminar, University of Connecticut, February 27, 2007.

(Talks, continued)

· *The homotopy orbit spectrum for profinite groups*
  · Topology Seminar, MIT, October 16, 2006.
  · Topology Seminar, Northwestern University, May 22, 2006.
· *A homotopy orbit spectral sequence for countably based profinite groups,*
  Topology et al. Seminar, Wesleyan University, September 27, 2006.
· *Examples of spectra with continuous profinite group actions,*
  Algebraic Topology Seminar, Mittag-Leffler Institute, February 7, 2006, invited speaker.
· *Interesting examples in the theory of spectra with a continuous action by a profinite group,*
  Topology Seminar, University of Notre Dame, October 11, 2005.
· *The theory of spectra with a continuous action by a profinite group,* at the conference "The Arithmetic of Structured Ring Spectra," Barony Rosendal, Norway, August 24, 2005, invited speaker.
· *Iterated homotopy fixed points for the Lubin-Tate spectrum,*
  Topology Seminar, Purdue University, September 9, 2004.
· *The Lubin-Tate spectrum E_n as a continuous G_n-spectrum and its homotopy fixed point spectra*
  · Topology Seminar, University of Illinois, Urbana-Champaign, February 10, 2004.
  · Topology Seminar, Purdue University, April 10, 2003.
  · Algebraic Topology Seminar, University of Chicago, February 4, 2003.
  · A.M.S., National Meeting, Homotopy Theory Session, Baltimore, January 18, 2003, invited speaker.
  · Topology Seminar, Northwestern University, October 31, 2002.
· *R. L. Moore: Thoughts on the Philosophy and Methods of an American Mathematical Pioneer,*
  Tennessee Academy of Science, November 18, 1994.
· *The R. L. Moore Experience,* Austin Peay State University's Galois Math Club, Fall, 1994.

HONORS, ACADEMIC ACHIEVEMENTS, and SCHOLARSHIPS

· Finalist for Math Department's T.A. Teaching Award, University of Illinois, Urbana–Champaign, May, 1999.
· 1st place (tied), Real Analysis Comprehensive Exam, University of Illinois, Urbana–Champaign, August, 1998.
· *Who's Who Among America's Teachers,* 1998.
· 1st place, Algebra Comprehensive Exam, University of Illinois, Urbana–Champaign, August, 1997.
· Included on *An Incomplete List of Teachers Ranked as Excellent By Their Students,* denoted *Outstanding,* University of Illinois, Urbana–Champaign, Spring 1996, Spring 1997, Fall 1997.
· College Cabinet Honor Scholarship, Vanderbilt University, full-tuition, 1990–1994.
· Scholarship for International Studies in London program of Vanderbilt University, at Birkbeck College, London, studied economics and politics, July–August, 1993.

CONFERENCE ATTENDANCE

· NSF/CBMS Regional Conference on "Topological and algebraic regularity properties of nuclear C^*–algebras," University of Louisiana at Lafayette, May, 2012.
· Lloyd Roeling UL Lafayette Mathematics Conference (in statistics), November, 2011.
· Structured Ring Spectra – TNG, University of Hamburg, Germany, August, 2011.
· The 2010 Georgia Topology Conference, University of Georgia, Athens, May, 2010.
· Lloyd Roeling UL Lafayette Mathematics Conference (in topology), October, 2009.
· Conference on Homotopy Theory and Applications, University of Nebraska, Lincoln, April, 2009.
· Howard Rowlee Lecture in Mathematics, University of Nebraska, Lincoln, April 3, 2009.
· The 2009 Spring Texas Geometry and Topology Conference, University of Houston, February, 2009.
· American Mathematical Society, Special Session on Homotopy Theory and Algebraic Topology, Huntsville, Alabama, October, 2008.

(Conference attendance, continued)

· Conference on Homotopical Group Theory and Topological Algebraic Geometry, Bonn, Germany, June, 2008.
· Conference on Complex Cobordism in Homotopy Theory: Its Impact and Prospects, Johns Hopkins University, March, 2007.
· MIT Topology Seminar, five times in Fall, 2006.
· Conference on the Arithmetic of Structured Ring Spectra, Rosendal, Norway, August, 2005.
· Lehigh University Geometry and Topology Conference, June, 2004.
· All-Chicago Topology Seminar, Northwestern University, May, 2004.
· Midwest Commutative Algebra and Geometry Meeting, Purdue University, May 19, 2004.
· Midwest Topology Seminar, Northwestern University, February, 2004.
· Midwest Topology Seminar, University of Wisconsin, October, 2003.
· Fields Institute Program on Homotopy Theory and its Applications, University of Western Ontario, September, 2003.
· Conference on Algebraic Topology in honor of Goro Nishida's 60th birthday, Kinosaki, Japan, July, 2003.
· American Mathematics Society, Homotopy Theory Sessions, Baltimore, January, 2003.
· Midwest Topology Seminar, University of Chicago, April, 2002.
· International Algebraic Topology Conference, Northwestern University, March, 2002.
· Midwest Topology Seminar, University of Illinois at Chicago, February, 2002.
· Ontario Topology Seminar, University of Western Ontario, October, 2001.
· Great Lakes K-Theory Conference, Evanston, April, 2001.
· Midwest Topology Seminar, University of Illinois at Chicago, February, 2001.
· Ontario Topology Seminar, University of Western Ontario, October, 2000.
· American Mathematics Society, Notre Dame, April, 2000.
· Midwest Topology Seminar, University of Chicago, February, 2000.
· Midwest Topology Seminar, Northwestern University, April, 1999.
· American Mathematics Society, Urbana, March, 1999.
· Midwest Topology Seminar, University of Michigan, October, 1998.

SERVICE and COMMITTEES (UNIVERSITY of LOUISIANA at LAFAYETTE)

· Organizer of the Colloquium for the Mathematics Department: Fall, 2010 – present.
· Member of the Faculty Senate, first term: Fall, 2010 – Spring, 2012.
· Member of the Faculty Senate, second term: Fall, 2012 – present.
· Library Committee (Math Dept.): 2008 – present.
· Graduate Students, Recruiting and Advertising Committee (Math Dept.): 2007–2009.
· Topology Comprehensive Exam Committee, chair: August, 2008; January, 2009; August, 2011; member: August, 2007; August, 2009; August, 2010; August, 2012.
· Complex Variables Comprehensive Exam Committee, member: August, 2008; August, 2009; August, 2010; August, 2011; August, 2012.
· Captain of Judges for the High School Math category, 2010 Louisiana Region VI Science and Engineering Fair.
· Member of the Master's degree committee for UL math graduate student Peter Thayer, M.S. expected in December, 2012.

PROFESSIONAL MEMBERSHIPS

· American Mathematical Society