

Curriculum Vitæ for Loren Spice

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EDUCATION

- **University of Chicago**, Chicago, IL (1998–2004).
 - M. S. in Mathematics (2000).
 - Ph. D. in Mathematics (2004).
- **Towson University**, Towson, MD (1996–1998).
 - B. S. in Mathematics, *summa cum laude* (1998).
- **Harford Community College**, Bel Air, MD (1994–1996).
 - A. A. in General Studies, *with high honours* (1996).

APPOINTMENTS AND HONOURS

- **Assistant professor** in mathematics, **University of Michigan** (2004–2008).
- **Research assistant professor** in mathematics, **Purdue University** (Winter 2005).
- **University of Chicago**.
 - **Instructor** in mathematics (2000–2004).
 - **College fellow** in mathematics (1999–2000).

RESEARCH PAPERS

- *Supercuspidal characters of reductive p -adic groups* (joint with J. Adler), 77 pp. Amer. J. Math., to appear. Available at [arXiv:0707.3313](https://arxiv.org/abs/0707.3313).
- *Good product expansions for tame elements of p -adic groups* (joint with J. Adler), Internat. Math. Research P. **2008** (2008), 95 pp. DOI 10.1093/imrn/rpn003. Available at [arXiv:math.RT/0611554](https://arxiv.org/abs/math/0611554).
- *Topological Jordan decompositions*, J. Algebra **319** (2008), no. 8, 3141–3163.
- *Supercuspidal characters of SL_ℓ over a p -adic field, ℓ a prime*, Amer. J. Math. **127** (2005), no. 1, 51–100.

EXPOSITORY PAPERS

- *Character theory of reductive p -adic groups* (joint with P. J. Sally, Jr.), 12 pp. To appear in “The Ottawa lectures on smooth representations and characters of reductive p -adic groups”.

RESEARCH TALKS

- *Supercuspidal characters and applications*, sectional meeting of AMS at **Western Michigan University** (Representations of real and p -adic Lie groups) (October 2008).

- *Supercuspidal characters and applications*, sectional meeting of AMS at **University of British Columbia** (p -adic groups and automorphic forms) (October 2008).
- *Characters of tame p -adic groups*, sectional meeting of AMS at **DePaul University** (Automorphic forms: representations of p -adic and adèlic groups) (October 2007).
- *Characters of division algebras over a p -adic field*, conference on the representation theory of p -adic groups at **King's College** in honour of Colin Bushnell (June 2007).
- *Characters of division algebras over a p -adic field*, automorphic forms and representation theory seminar at **Purdue University** (March 2007).
- *Characters of division algebras over a p -adic field*, study seminar at **University of British Columbia** (November 2006).
- *Characters of division algebras over a p -adic field*, Midwest representation theory conference at **University of Chicago** (March 2006).
- *Characters of tame division algebras over a p -adic field*, number theory and representation theory seminar at **University of Toronto** (November 2005).
- *Supercuspidal characters of p -adic SL_ℓ , ℓ a prime*, CMS/CSHPM meeting at **University of Waterloo** (Representation theory) (June 2005).
- *Supercuspidal characters of SL_ℓ with ℓ a prime*, I and II, automorphic forms and representation theory seminar at **Purdue University** (January and February 2005).
- *Supercuspidal characters of SL_ℓ over a p -adic field, ℓ a prime*, sectional meeting of AMS at **Northwestern University** (Representation theory of reductive groups) (October 2004).
- *Supercuspidal characters of SL_ℓ over a p -adic field, ℓ a prime*, Lie theory and group theory seminar at **University of Michigan** (September 2003).
- *Supercuspidal characters of SL_ℓ over a p -adic field, ℓ a prime*, student seminar at **University of Chicago** (May 2003).

EXPOSITORY TALKS

- *Can you tell me the way to sum to A ?*, undergraduate mathematics club at **University of Michigan** (January 2008).
- *Quick 'n' dirty sorting*, undergraduate mathematics club at **University of Michigan** (September 2006).
- *p -adic numbers*, REU program at **University of Akron** (Summer 2006).
- *p -adic numbers*, REU program at **University of Akron** (Summer 2005).
- *The p -adic numbers (or, size does matter)*, undergraduate mathematics club at **University of Michigan** (September 2004).
- *p -adics*, undergraduate mathematics club at **University of Chicago** (February 2004).

FUNDING

- National Science Foundation **Mathematical Sciences Post-doctoral Research Fellowship** (2005–2009).
- University of Chicago **Robert H. McCormick Fellowship** (1998–2004).

TEACHING EXPERIENCE

- **University of Michigan.** Fully responsible for all instruction and grading in all courses.
 - Math 715, Topics in algebra: Representation theory of reductive p -adic groups (Fall 2008).
 - Math 431, Topics in geometry for teachers (Fall 2008).
 - Math 594, Algebra II (Winter 2008).
 - Math 486, Concepts basic to secondary-school mathematics (Winter 2008).
 - Math 486, Concepts basic to secondary-school mathematics (Winter 2007).
 - Math 385, Math for elementary-school teachers (Fall 2006).
 - Math 486, Concepts basic to secondary-school mathematics (Winter 2006).
 - Math 416, Theory of algorithms (Fall 2005).
 - Math 215, Multivariable calculus (Fall 2004).
- **Purdue University.** Fully responsible for all instruction and grading.
 - Math 266, Ordinary differential equations (Winter 2005).
- **SESAME** program, designed by Paul J. Sally, Jr., to provide a solid mathematical background for practicing secondary-education teachers. Course assistant and note-taker.
 - Algebra (Summer 2008).
 - Number theory (Winter 2001 and Winter 2002).
- **University of Chicago.** Fully responsible for all instruction and grading in all courses except Math 207–209, Honours Analysis, taught by Paul J. Sally, Jr. As college fellow for Math 207–209, responsible for all grading and for holding office hours.
 - Math 195–6, Multi-variable calculus and linear algebra (2003–2004).
 - Math 151–2, Calculus (2000–2001 and 2001–2002).
 - Math 207–9, Honours Analysis (1999–2000).

ADVISING

- Cognate member on doctoral committee, **University of Michigan** School of Education. One advisee (2008–2009).
- Undergraduate research experience advisor (with Stephen DeBacker), **University of Michigan** School of Mathematics. Two advisees (Summer 2008).

REFERENCES (RESEARCH)

- Jeffrey D. Adler, 4400 Massachusetts Ave., NW, Washington, DC 20016, (202) 885-3361, jadler@american.edu.
- Stephen DeBacker, 530 Church St., Ann Arbor, MI 48109, (734) 763-3274, smdbackr@umich.edu.
- Paul Sally, 5734 S. University Ave., Chicago, IL 60637, (773) 702-7388, sally@math.uchicago.edu.

REFERENCES (TEACHING)

- Diane Herrmann, 5734 S. University Ave., Chicago, IL 60637, (773) 702-7332, diane@math.uchicago.edu.
- Curtis Huntington, 530 Church St., Ann Arbor, MI 48109, (734) 763-0293, chunt@umich.edu.