William A. Stein *Biographical Sketch*

Professional preparation

Harvard University	NSF Postdoc, 2000–2004
University of California at Berkeley	Mathematics, Ph.D. 2000
Northern Arizona University	Mathematics, B.S. 1994

Appointments

- *Professor* of Mathematics, University of Washington, September 2010–now.
- *Associate Professor* of Mathematics, University of Washington, April 2006–August 2010.
- *Associate Professor* of Mathematics, UC San Diego, July 2005–March 2006.
- Benjamin Peirce *Assistant Professor* of Mathematics, Harvard University, July 2001–May 2005.
- *NSF Postdoctoral* Research Fellowship under Barry Mazur at Harvard University, August 2000–May 2004.
- Clay Mathematics Institute Liftoff Fellow, Summer 2000.

Products related to proposal

- Founded SageMathCloud in 2013 (see `https://cloud.sagemath.com`).
- Founded SageMath in 2004 (see `http://sagemath.org`), which is a large free open source software project that has over 50,000 active users.
- *Elementary Number Theory: Primes, Congruences, and Secrets* (185 pages), published in the Springer-Verlag UTM series, 2008.
- *PRIMES* (136 pages), with B. Mazur, a book on the Riemann Hypothesis, under contract with Cambridge Univ. Press (see `http://wstein.org/rh/`).
- *The Sage Project: Unifying Free Mathematical Software to Create a Viable Alternative to Magma, Maple, Mathematica and Matlab* (2010), with B. Erocal, for plenary talk at the 2010 International Congress of Math. Software.

Other significant products

- *Non-commutative Iwasawa theory for modular forms* (40 pages), with J. Coates, T. Dokchitser, Z. Liang, R. Sujatha, 2013, in Proceedings of the LMS.
- *Computations About Tate-Shafarevich Groups Using Iwasawa Theory* (46 pages), with C. Wuthrich, 2012, Mathematics of Computation.
- *Heegner Points and the Arithmetic of Elliptic Curves over Ring Class Extensions*, with R. Bradshaw (15 pages), 2012, J. Number Theory.
- *Toward a Generalization of the Gross-Zagier Conjecture* (33 pages), Int Math Res Notices (2011) Vol. 2011 309-341.
- *Modular forms, a computational approach* (xvi+268 pp.) Graduate Studies in Mathematics (AMS) 79 2007, with an appendix by Paul Gunnells.

Synergistic activities

- ACM/SIGSAM 2013 winner of the *Richard Dimick Jenks Memorial Prize* for Excellence in Software Engineering applied to Computer Algebra.
- SIMUW 2006, 2007, 2008, 2012; Canada/USA MathCamp mentor (2002); Math Circles talks in Boston; 2011 REU on elliptic curves; 2013 REU on Sage; involved dozens of undergraduates in work on the Sage software.

Collaborators and other affiliations

- **Collaborators during last 48 months (23 total):** Jennifer S. Balakrishnan, Jonathan Bober, Robert Bradshaw, Mirela Ciperiani, John Coates, Henri Darmon, Michael Daub, Alyson Deines, Tim Dokchitser, Burcin Erocal, Ariah Klages-Mundt, Benjamin LeVeque, Zhibin Liang, Sam Lichtenstein, J. Steffen Müller, Barry Mazur, R. Andrew Ohana, Clement Pernet, A. Rabindranath, Victor Rotger, Paul Sharaba, Ramdorai Sujatha, Christian Wuthrich
- **Graduate Advisors and Postdoctoral Sponsors (2 total):**
  - **Ph.D. advisor:** Hendrik Lenstra, University of Leiden, Netherlands.
  - **NSF Postdoctoral advisor:** Barry Mazur, Harvard University.
- **Thesis Advisor and Postgraduate-Scholar Sponsor (8 total):**
  - 6 Ph.D. students: Robert Bradshaw (Google, 2010 Ph.D.); Robert Miller's(Applauze, 2010 Ph.D.); Alyson Dienes (CCR, 2014 Ph.D.); Simon Spicer's (Ph.D., June 2015); Hao Chen's (Ph.D. expected June 2016); Andrew Ohana (Ph.D. expected June 2016);
  - 2 Postdocs: Clement Pernet (Grenoble; postdoc 2007–2008), Craig Citro (Google; postdoc 2009).