

# AARON NATHAN SIEGEL

## EDUCATION

- Ph.D. **University of California, Berkeley**  
Mathematics, May 2005  
Thesis Title: Loopy Games and Computation  
Advisor: Professor Elwyn Berlekamp
- M.S. **Carnegie–Mellon University**  
Mathematics, May 1999  
Thesis Title: Two Examples of Lavrentiev’s Phenomenon  
Advisor: Professor William Hrusa
- B.S. **Carnegie–Mellon University**  
Electrical and Computer Engineering, May 1999  
GPA: 4.0 out of 4.0

## RESEARCH POSITIONS

- 2006–07 Institute for Advanced Study, Princeton, NJ  
Special Program in Theoretical Computer Science and Discrete Mathematics
- 2005–06 Mathematical Sciences Research Institute, Berkeley, CA
- 2004 Center for Pure and Applied Mathematics, Berkeley, CA
- 2003 International Computer Science Institute, Berkeley, CA

## FELLOWSHIPS AND AWARDS

- 2005 Herb Alexander Prize for Outstanding Doctoral Dissertation
- 1999-02 National Defense Science and Engineering Graduate Fellow
- 1995-99 Dean’s List, Carnegie Institute of Technology
- 1997 Ford Motor Scholarship

## REFEREED PAPERS

1. A. N. Siegel and T. E. Plambeck. The  $\Phi$ -values of various games. In preparation.
2. A. N. Siegel. Loopy and loopfree canonical values in Hare and Hounds. Submitted for publication.
3. A. N. Siegel. Reduced canonical forms of stoppers. Submitted for publication.
4. A. N. Siegel. Coping with cycles. To appear in M. Albert and R. J. Nowakowski, editors, *Games of No Chance 3*, MSRI Publications. Cambridge University Press, Cambridge, 2006.
5. A. N. Siegel. New results in loopy games. To appear in *Games of No Chance 3*.
6. A. N. Siegel. Backsliding Toads and Frogs. To appear in *Games of No Chance 3*.
7. A. N. Siegel and J. P. Grossman. Reductions of partizan games. To appear in *Games of No Chance 3*.

## OTHER WORKS AND PUBLICATIONS

1. A. N. Siegel. *Loopy Games and Computation*. PhD thesis, University of California at Berkeley, 2005.
2. A. N. Siegel. Two examples of Lavrentiev’s phenomenon. Master’s thesis, Carnegie–Mellon University, 1999.
3. A. N. Siegel. Combinatorial Game Suite. <http://www.cgsuite.org/>.

## INVITED TALKS

- 2006 “The Misère Mex Mystery,” CMS Summer Meeting, Calgary, Alberta  
“Miserable Monoids,” MSRI, Berkeley, CA
- 2005 “Miserable Monoids,” Commutative Algebra Seminar, UC Berkeley  
“Miserable Monoids,” INTEGERS Conference 2005, Carrollton, GA  
“Loopy Games,” BIRS Combinatorial Game Theory Workshop, Banff, Alberta  
“Companionship and Lattices,” BIRS Combinatorial Game Theory Workshop  
“Lattices of Partizan Games,” Combinatorics Seminar, UC Berkeley  
“Surreal Numbers,” Dalhousie University, Halifax
- 2004 “Calculating Values of Loopy Games,” CMS/CAIMS Summer Meeting, Halifax
- 2003 Assistant, *A Tour of Combinatorial Games* (MAA Summer Seminar), St. Peter, MN

## TEACHING EXPERIENCE

- 2002-04 **University of California, Berkeley**—Graduate Student Instructor  
Calculus for Engineering Students, Calculus for Humanities Students,  
Cognitive Science of Mathematics  
Average Student Evaluation: **6.0 out of 7**
- 1997-98 **Carnegie–Mellon University**—Teaching Assistant  
Calculus for Engineering Students, Discrete Mathematics

## SOFTWARE DEVELOPMENT EXPERIENCE

- 2006 Money Management Group, Pleasant Hill, CA
- 2005 Fortify Software, Palo Alto, CA
- 1998, 99, 01 Microsoft Corporation (Evaluation Score: 5 out of 5)
- 1997 Syscom, Inc., Baltimore, MD

## PROFESSIONAL ORGANIZATIONS AND SOCIETIES

American Mathematical Society  
Association for Symbolic Logic  
Mathematical Association of America

## REFERENCES

- Professor Elwyn Berlekamp**                      University of California, Berkeley  
berlek@math.berkeley.edu  
(510) 849-4214
- Professor Richard Nowakowski**                      Dalhousie University  
rjn@mathstat.dal.ca  
(902) 494-3732
- Associate Professor David Wolfe**                      Gustavus Adolphus College  
wolfe@gustavus.edu  
(507) 933-7469
- Professor W. Hugh Woodin**                      University of California, Berkeley  
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