

# Bradley M. Froehle

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CITIZENSHIP United States.

EDUCATION

- ◇ **University of California, Berkeley**, Berkeley, CA.  
September 2007–present.  
Graduate Student in Mathematics.
- ◇ **University of Minnesota**, Minneapolis, MN.  
September 2003–May 2007; GPA: 3.98.  
Bachelor of Science in Mathematics *summa cum laude with high distinction*.  
Bachelor of Science in Physics *with high distinction*.

RESEARCH INTERESTS Computational biology, mathematical physics, representation theory, computational group theory.

RESEARCH PROJECTS Preprints of the following papers are available at <http://math.berkeley.edu/~bfroehle/>.

- ◇ *An Introduction to Combinatorial Garside Structures*  
Senior thesis, advised by Peter Webb (University of Minnesota).
- ◇ *Algorithms for Precomputing Fast Fourier Transforms of the Symmetric Group*  
(with M. Jameson) Poster presented at Undergraduate Student Poster Session, Joint Mathematics Meetings, Jan. 2007.
- ◇ *On Generators of Bounded Ratios of Minors for Totally Positive Matrices*  
(with A. Boocher) *Linear Algebra Appl.* **428** (2008), no. 7, 1664–1684.

FELLOWSHIPS & SCHOLARSHIPS

- ◇ Simons Fellowship, UCB – 2007–2008
- ◇ Hagstrum Award in Physics – 2007
- ◇ Barry M. Goldwater Scholar – 2005–2007
- ◇ Alfred O. C. Nier Award for Physics – 2004–2005
- ◇ Other Undergraduate Scholarships: 3M Alumni Scholarship, Hackett & Jones Scholarship, National Merit Finalist Corporate Scholarship, Ella Thorpe Scholarship, William L. Hart Scholarship

AWARDS

- ◇ NSF Graduate Research Fellowship Program: Honorable Mention – 2008
- ◇ NSF Graduate Research Fellowship Program: Honorable Mention – 2007
- ◇ Joint Mathematics Meetings Undergraduate Student Poster Session: Winner – 2007
- ◇ William Lowell Putnam Mathematical Competition
  - 2006: 193.5th place finish. Score: 31.8
  - 2005: 219th place finish. Score: 31
  - 2004: 122nd place finish. Score: 46
  - 2003: 200th place finish. Score: 30.3

TEACHING EXPERIENCE

- ◇ **Tutor**, Institute of Technology Honors Program, University of Minnesota (2004–2007)  
Tutored freshmen and sophomore IT Honors students needing assistance in Mathematics and Physics.

- EXTRA-  
CURRICULAR  
ACTIVITIES
- ◇ **University of California, Berkeley**
    - 2008–present - Officer, Mathematics Graduate Students Association
    - 2007–present - Graduate Assembly (Graduate Student Government)
      - Delegate for the Mathematics department.
      - Chair of the Environmental Sustainability Committee.
  - ◇ **University of Minnesota**
    - 2003–2007 - Institute of Technology Honors Group
    - 2003–2006 - University of Minnesota Basketball Pepband
    - 2003–2005 - University of Minnesota Marching Band
    - 2004–2005 - University of Minnesota University Band (Concert Band)
- REFERENCES Available upon request.