

BRIDGET EILEEN TENNER

Department of Mathematics
DePaul University
2320 North Kenmore Avenue
Chicago, IL 60614

522 Schmitt Academic Center
(773) 325-4220
bridget@math.depaul.edu
<http://math.depaul.edu/~bridget>

EMPLOYMENT

DePaul University <i>Assistant Professor</i>	2007 to Present
Massachusetts Institute of Technology <i>Research Affiliate</i>	2006 to 2007

EDUCATION

Massachusetts Institute of Technology Ph.D. Mathematics Dissertation: <i>The Combinatorics of Reduced Decompositions</i> Advisor: Richard P. Stanley	2006
Harvard University A.M. Mathematics	2002
Harvard University A.B. Mathematics, <i>magna cum laude</i>	2002

HONORS AND AWARDS

Summer Research Stipend, DePaul University, College of Liberal Arts & Sciences	2008
National Science Foundation Postdoctoral Research Fellowship (awarded, not taken)	2007
Sigma Xi, Massachusetts Institute of Technology chapter	2005
National Science Foundation Graduate Research Fellowship	2002 to 2006
Applied Mathematics Fellowship, Massachusetts Institute of Technology	2002 to 2003
Herbert James Alexander Award in Mathematics, Harvard University	2002
Phi Beta Kappa, Alpha Iota chapter	2002
Certificate of Distinction in Teaching, Harvard University	2000
John Harvard Scholarship	1999 to 2002
Harvard College Scholarship	1998 to 1999

RESEARCH INTERESTS

Combinatorics – algebraic, enumerative, and topological. Recent work includes homotopy equivalence, cell complexes, Bruhat intervals, reduced decompositions, pattern avoidance, Coxeter groups, posets, zonotopal tilings, domino tilings, and sorting algorithms.

PUBLICATIONS

1. *Pattern avoidance and the Bruhat order*
Journal of Combinatorial Theory, Series A, Volume 114, 2007, 888–905
2. *A non-messing-up phenomenon for posets*
Annals of Combinatorics, Volume 11, 2007, 101–114
3. *On expected factors in reduced decompositions in type B*
European Journal of Combinatorics, Volume 28, 2007, 1144–1151
4. *Reduced decompositions and permutation patterns*
Journal of Algebraic Combinatorics, Volume 24, 2006, 263–284
5. *Tiling parity results and the holey square solution*
Electronic Journal of Combinatorics, Volume 11(2), 2005, R17
6. *Spotlight tiling*
arXiv:0711.1819, to appear in Annals of Combinatorics
7. *Homotopy type of the boolean complex of a Coxeter system*
(with Kári Ragnarsson) arXiv:0806.0906, submitted
8. *Relations on generalized degree sequences*
(with Caroline J. Klivans and Kathryn L. Nyman) arXiv:0806.4012, submitted
9. *Obtainable sizes of topologies on finite sets*
(with Kári Ragnarsson) arXiv:0802.2550, submitted
10. *Domino tiling congruence modulo 4*
arXiv:0705.1300, submitted

PRESENTATIONS

ICE-TCS Research Seminar, Reykjavík University, Iceland	June 2008
AMS Spring Central Section Meeting, Special Session, Indiana University	April 2008
Combinatorics Seminar, University of Michigan	February 2008
Introductory Workshop on Combinatorial Representation Theory, MSRI	January 2008
Graph Theory & Combinatorics Seminar, University of Illinois, Urbana-Champaign	October 2007
Combinatorics Seminar, Indiana University	October 2007
Special Combinatorics Seminar, University of Wisconsin	January 2007
Mathematics Colloquium, DePaul University	January 2007
Applied Mathematics Seminar, Illinois Institute of Technology	November 2006
Combinatorics Seminar, University of Illinois at Chicago	November 2006
ICE-TCS Research Seminar, Reykjavík University, Iceland	January 2006
Theory Group Seminar, Microsoft Research, Seattle, Washington	October 2005
Combinatorics Seminar, University of Washington	October 2005
Combinatorics Seminar, University of California, Berkeley	September 2005
Discrete Geometry and Combinatorics Seminar, Cornell University	September 2005
Poster Session, Formal Power Series and Algebraic Combinatorics, Italy	June 2005
Institute Seminar, Institut Mittag-Leffler, Sweden	April 2005
P-doc Seminar, Institut Mittag-Leffler, Sweden	April 2005
Combinatorics Seminar, Massachusetts Institute of Technology	September 2004

PROFESSIONAL ACTIVITIES

Referee

Annals of Combinatorics
 Discrete Mathematics
 Icelandic Research Fund
 Journal of Algebraic Combinatorics

Committee member – DePaul University Department of Mathematics

Undergraduate Curriculum Committee 2007 to Present
 Computer Usage Committee 2007 to Present

Author of professional development materials

Seminars for Elementary Specialists and Mathematics Educators 2007 to Present

Creator and Maintainer

Database of Permutation Pattern Avoidance 2005 to Present
<http://math.depaul.edu/~bridget/patterns.html>

Writing staff

American Regions Mathematics League 2005 to 2007

Non-resident tutor

Quincy House, Harvard University 2002 to 2006

Participant

Program on Combinatorial Representation Theory, MSRI 2008
 Semester on Algebraic Combinatorics at the Institut Mittag-Leffler, Sweden 2005
 Research Experiences in Algebraic Combinatorics at Harvard 2001 to 2002

TEACHING EXPERIENCE

DePaul University

College Algebra & Precalculus 2007 to Present
Discrete Mathematics I

New Trier High School

AP Calculus AB 2006 to 2007
Algebra II

Massachusetts Institute of Technology (*Course Administrator, Recitation Instructor*) 2003 to 2004

Calculus
Linear Algebra

Seminars for Elementary Specialists and Mathematics Educators (*Counselor*)

Algebra 2001 to 2003
Number Theory
Probability

Harvard University (*Head Course Assistant, Course Assistant*)

Multivariable Calculus 1999 to 2002
Linear Algebra & Differential Equations
Calculus, Series & Differential Equations
