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Employment:

VIGRE Fellow and Visiting Research Assistant Professor, University of California, Davis (July 2009 —).

Education:

Doctor of Philosophy, Mathematics, University of Minnesota (August 2009).
Bachelor of Science, Mathematics (magna cum laude), University of Minnesota (May 2004).

Research Interests:

Algebraic combinatorics. Some things I particularly like are combinatorial aspects of representation theory and algebraic aspects of matroid theory.

Papers:

6. *The Whitney Module of a Matroid* (in preparation).
5. *Symmetries of Tensors* (Ph.D. thesis).
4. *Products of Linear Forms and Tutte Polynomials*. Submitted to the European Journal Of Combinatorics.
3. *Bicyclic Sieving of Words, Finite Fields and Graphs* (with Sen-Peng Eu, Victor Reiner and Dennis Stanton). In preparation.
2. *Critical Groups and Line Graphs* (with Andrew Manion, Molly Maxwell, Aaron Potechin and Victor Reiner). Submitted to Annals of Combinatorics.
1. *A Short Proof of Gamas's Theorem*. Linear Algebra and Its Applications 430 (2009) pp. 791-793.

Invited Talks:

10. University of Minnesota Combinatorics Seminar. December 2009.
9. CMS special session on Algebraic Combinatorics (Fredericton, NB). June 2010.
8. University of California, Davis Discrete Math Seminar. October 2009.
7. AMS Special Session on Matroids in Algebra and Geometry. (San Francisco), April 2009.
6. Univeristy of Illinois Urbana-Champaign Algebra Geometry and Combinatorics Seminar. January 2009.
5. Université Pierre et Marie Curie Séminaire Combinatoire Algébrique et Géométrique (Paris). October 2008.
4. Centro de Estruturas Lineares e Combinatórias (Lisbon). October 2008.
3. AMS Special Session on Combinatorial Representation Theory (Vancouver, AB). October 2008.
2. Univeristy of Kansas Combinatorics Seminar. September 2008.
1. University of Minnesota Combinatorics Seminar. April 2008.

Teaching:

5. Winter 2010 instructor for an undergraduate introduction to combinatorics (Math 145) at the University of California, Davis.
4. Fall 2009 instructor for third quarter of short calculus (Math 16C) at the University of California, Davis. Roughly 220 students.
3. Teaching Assistant for *Sequences Series and Foundations* at the University of Minnesota, Spring 2008. This is a writing intensive course which introduces undergraduates to higher level mathematics.
2. Teaching Assistant for Calculus I and II (calculus of one variable). A total of six semesters taught at the University of Minnesota between Fall 2004 and Spring 2009.
1. Grading for advanced undergraduate courses in enumerative combinatorics, graph theory, algebra and real analysis on various occasions since Fall 2003.

Conferences Attended:

7. AMS Special Session on Matroids in Algebra and Geometry (San Francisco), (April 2009).
6. AMS Special Session on Combinatorial Representation Theory (Vancouver), (October 2008).
5. Graduate Student Combinatorics Conference (Davis), April 2008.
4. Introductory Workshop on Combinatorial Representation Theory (MSRI), January 2008.
3. Graduate Student Combinatorics Conference (U.W. Seattle), April 2007.
2. Workshop on Geometric and Topological Combinatorics (Alcalá de Henares, Spain), August 2006.
1. Geometric Combinatorics (IAS/Park City Mathematics Institute), July 2004.

Other Activities:

Referee for *Transactions of the American Mathematical Society* and *Acta Mathematica Sinica*.

Organizer of the Student Combinatorics Seminar, Fall 2007.

Council of Graduate Students Representative for the Mathematics Department. Fall 2006 and Spring 2007.