

# Jinkui Wan

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## Education

- **University of Virginia**, Charlottesville, Virginia, USA  
Expected Ph.D. completion date: May 2010, Advisor: Prof. Weiqiang Wang
- **Beijing Normal University**, Beijing, China  
M.A. Mathematics, 2006, Advisor: Prof. Bangming Deng  
B.S. Mathematics, 2003

## Research Interest

Representation theory of Lie algebras, Hecke algebras and connections to algebraic combinatorics

## Papers

- Frobenius morphisms and stable module categories of repetitive algebras, (with Bangming Deng), Science in China Series A-Mathematics 51(2008), no.2, 169–184.
- Modular representations and branching rules for wreath Hecke algebras, (with Weiqiang Wang), International Mathematics Research Notices (2008), Article ID: rnn128-31, 31 pages.
- Wreath Hecke algebras and centralizer construction for wreath products, 27 pages, 2008, Submitted for publication. arXiv:0810.2767.
- Completely splittable representations of affine Hecke-Clifford algebras, 38 pages, J. Algebr. Combin. (2009), to appear.

## Grants and Fellowships awarded

- **Mathematics Department Dissertation Fellowship**, University of Virginia, Fall 2009.  
Relieved of teaching duties for one semester to concentrate on completion of dissertation.
- **East China Normal University travel support**, Summer 2009  
Received partial support from East China Normal University to attend the Workshop and Summer School on Lie Theory and Representation Theory II from July 13 to July 31, Shanghai, China.
- **Fields Institute travel support**, Summer 2009  
Received support from to take the Summer School and Conference in Geometric Representation Theory and Extended Affine Lie Algebras from June 15 to July 3 in University of Ottawa, Ontario, Canada.
- **Mathematics Department Research Fellowship**, University of Virginia, Spring 2009.  
Relieved of teaching duties for one semester to concentrate on completion of dissertation.

- **Graduate Travel Support**, University of Virginia, Spring 2008.  
Awarded funds to travel to Mathematical Sciences Research Institute to attend March 2008 workshop on Lie Theory.

## Talks

- *Hall-Littlewood functions and Kostka-Foulkes functions in representation theory*  
Morningside Center of Mathematics Chinese Academy of Sciences, Beijing, August 10, 2009.
- *Completely splittable representations of affine Hecke-Clifford algebras*  
Workshop and Summer School on Lie Theory and Representation Theory II, East China Normal University, Shanghai, July 13, 2009.
- *Completely splittable representations of affine Hecke-Clifford algebras*  
Algebra Seminar, Morningside Center of Mathematics Chinese Academy of Sciences, Beijing, December 25, 2008.
- *Modular representations and branching rules for wreath Hecke algebras*  
Algebra Seminar, Morningside Center of Mathematics Chinese Academy of Sciences, Beijing, May 17, 2008
- *Modular branching rules of wreath Hecke algebras and affine crystal graphs*  
Algebra Seminar, University of Virginia, April 23, 2008.

## Conferences and Workshops Attended/ing

- Workshop and summer school on Lie Theory and Representation Theory II, East China Normal University, Shanghai, July 13–July 31, 2009.
- Summer School and Conference in Geometric Representation Theory and Extended affine Lie Algebras, University of Ottawa, June 15–July 3, 2009.
- Mathematical Sciences Research Institute (MSRI) program on Lie Theory. Berkeley, CA; March 10–March 14, 2008.
- Summer School in Lie Theory, University of Science and Technology of China, Hefei, June 25–July 8, 2007.
- Summer School on Derived categories in representation theory (with a view towards geometry and topology), Tsinghua University, Beijing, August 22–August 26, 2005.
- Workshop on Algebras and Representations in China and Europe, Beijing Normal University, Beijing, May 23–May 28, 2005.

## Teaching Experience

- **Instructor, Calculus I and II**, Fall 2007, Spring 2008, Fall 2008.  
Taught two semesters of first semester calculus and one semester of second semester calculus. These lower-level calculus courses are targeted at students majoring in business, the humanities and the social sciences. Typical classes consisted of 35-45 students. Responsible for lecturing all course material, assigning and grading homework, assisting in the preparation of midterm and final exams, grading exams and assigning final letter grades.

- **Teaching Assistant, Applied Mathematics**, Fall 2006, Spring 2007.

This introductory course was taught in the Engineering school to approximately 50 undergraduate Engineering majors. Responsible for conducting the weekly fourth-hour problem session, assigning and grading weekly quizzes, and assisting in the grading of exams.