

Zhaoting Wei

Department of Mathematics
University of Pennsylvania
209 South 33rd Street Philadelphia, PA 19104, USA
☎ +1 (215) 898-8175
☎ +1 (215) 573-4063
✉ zhaotwei@sas.upenn.edu
🌐 www.math.upenn.edu/~zhaotwei/

Personal Information

Nationality Chinese

Education

- 2007-2013 **Ph.D in Mathematics**, *University of Pennsylvania*, Philadelphia, PA.
Advisor: Prof. Jonathan Block
Thesis title: Baum-Connes Conjecture, Flag Varieties and Representations of semisimple Lie Groups
- 2004-2007 **B.S. in Mathematics**, *Peking University*, Beijing, China.
- 2003-2004 **Undergraduate, majored in Mechanics**, *Peking University*, Beijing, China.
I transferred to the School of Mathematical Sciences in 2004

Research Interests

Noncommutative geometry, Representation theory, Category theory and Mathematical physics

Honors and Awards

- 2008 **Presidential Prize**, *University of Pennsylvania*.
- 2007-2011 **Benjamin Franklin Fellowship**, *University of Pennsylvania*.
- 2005-2006 **Chun-Tsung Scholarship**, *Peking University*.
- 2004 **Wusi Scholarship**, *Peking University*.

Publications and Preprints

- [1] Zhaoting Wei. Covariant Weil algebras. arXiv:1211.3552, 2012.
- [2] Zhaoting Wei. A proof of Baum-Connes conjecture of real semisimple lie groups with coefficient on flag varieties. arXiv:1211.4544, 2012.
- [3] Zhaoting Wei. The noncommutative Poisson bracket and the deformation of the family algebras. arXiv:1211.5865, 2012.
- [4] Jonathan Block and Zhaoting Wei. Equivariant dg-categories. in preparation.

Invited Talks

- November 2012 **Real group orbits on flag varieties and equivariant K-theory**.
Noncommutative Geometry Seminar, Pennsylvania State University, University Park, PA

Seminar Talks

- February 2013 **From simplicial sets to simplicial groups and back.**
Algebra Seminar, Temple University, Philadelphia, PA
- September 2012 **Pseudo-operads, operads, examples.**
Algebra Seminar, Temple University, Philadelphia, PA
- July 2012 **The Springer resolution.**
Graduate Student Seminar, University of Pennsylvania
- March 2011 **Weil algebras and covariant Weil algebras, quantizations (2 talks).**
Noncommutative Geometry Seminar, University of Pennsylvania
- February 2011 **Representation functors and representation schemes.**
Graduate Student Pizza Seminar, University of Pennsylvania
- October 2009 **Introduction to C^* -algebras and K -theory (3 talks).**
Math-Physics Reading Seminar, University of Pennsylvania
- April 2009 **Chern's intrinsic proof of Gauss-Bonnet formula.**
Graduate Student Geometry-Topology Seminar, University of Pennsylvania
- March 2009 **Spin structure and Dirac operators (3 talks).**
Noncommutative Geometry Seminar, University of Pennsylvania
- February 2008 **Hopf algebra (2 talks).**
Graduate Student Algebra Seminar, University of Pennsylvania
- March 2007 **Pseudodifferential Operators (2 talks).**
Undergraduate Student Reading Seminar, Peking University
- October 2006 **Fredholm Operators and the Index Map.**
Undergraduate Student Reading Seminar, Peking University

Service

- Fall 2006-
Spring 2007 **Organizer**, *Undergraduate Student Reading Seminar*, Peking University, Beijing, China.
Organizer for a reading seminar on the Atiyah-Singer index theorem

Conference Participation

- May 2013 **The Eleventh Annual Spring Institute on Noncommutative Geometry and Operator Algebras.**
Vanderbilt University, Nashville, TN
- April 2013 **Interactions between Noncommutative Algebra, Representation Theory, and Algebraic Geometry.**
MSRI, Berkeley, CA
- January 2013 **Introductory Workshop: Noncommutative Algebraic Geometry and Representation Theory.**
MSRI, Berkeley, CA
- August 2012 **Workshop on Categorical Representation Theory.**
University of Oregon, Eugene, OR
- June 2012 **Workshop on Noncommutative Algebraic Geometry.**
MSRI, Berkeley, CA

- May 2012 **Spring School on Algebraic Microlocal Analysis.**
Northwestern University, Evanston, IL
- May 2012 **Perspectives in Representation Theory: A Conference in Honor of Igor Frenkel.**
Yale University, New Haven, CT
- May-June 2011 **Summer School and Conference on Mathematical Aspects of Quantization.**
University of Notre Dame, Notre Dame, IN
- May 2011 **The Ninth Annual Spring Institute on Noncommutative Geometry and Operator Algebras.**
Vanderbilt University, Nashville, TN
- July 2009 **Workshop and Summer School on Lie Theory and Representation Theory.**
East China Normal University, Shanghai, China
- June 2009 **Summer School on Geometry of Quantum Fields and Strings.**
University of Pennsylvania, Philadelphia, PA
- May 2009 **Georgia International Topology Conference.**
University of Georgia, Athens, GA
- July 2006 **Workshop and Summer School on Algebraic Geometry.**
East China Normal University, Shanghai, China

Teaching Experience

- Spring 2013 **Math 104 Calculus I, University of Pennsylvania.**
Grader
- Spring 2013 **Math 619 Algebraic Topology, Part I, University of Pennsylvania.**
Grader
- Fall 2012 **Math 360 Advanced Calculus I, University of Pennsylvania.**
Teaching Assistant in charge of recitations and homework grading
- Fall 2012 **Math 371 Abstract Algebra II, University of Pennsylvania.**
Teaching Assistant in charge of recitations and homework grading
- Summer 2012 **Maple Help Session, University of Pennsylvania.**
Responsible for helping students with maple and solving other mathematic problems
- Spring 2012 **Math 601 Introduction to Algebraic Topology, University of Pennsylvania.**
Grader
- Fall 2011 **Math 600 Topology and Geometric Analysis, University of Pennsylvania.**
Grader
- Summer 2011 **Math 104 Calculus I, University of Pennsylvania.**
Independent Instructor in charge of course
- Summer 2010 **Maple Help Session, University of Pennsylvania.**
Responsible for helping students with maple and solving other mathematic problems
- Spring 2010 **Math 425 Partial Differential Equations, University of Pennsylvania.**
Grader
- Fall 2009 **Math 104 Calculus I, University of Pennsylvania.**
Teaching Assistant in charge of recitations and homework grading
- Spring 2009 **Math 104 Calculus I, University of Pennsylvania.**
Teaching Assistant in charge of recitations and homework grading

Fall 2008 **Math 361 Advanced Calculus II**, *University of Pennsylvania*.

Teaching Assistant in charge of recitations and homework grading

Fall 2008 **Math 114 Calculus II**, *University of Pennsylvania*.

Teaching Assistant in charge of recitations and homework grading

Languages

Chinese **Native**

English **Fluent**

French **Basic**

Computer Skills

Basic HTML, C++, Singular, GAP

Tools Maple

Updated

May 16, 2013