Jonathan Wang

Insitute for Advanced Study
School of Mathematics
1 Einstein Drive
Princeton, NJ 08540
🖥 jonathanpwang.com
Citizenship: United States

Professional Positions

9/2017–Present **Member**, *Institute for Advanced Study*, Princeton, NJ.

Research Interests

Representation Theory, Automorphic Forms, Langlands Program, Geometric Langlands Program

Education

2012–2017 **Ph.D. in Mathematics**, *University of Chicago*, Chicago, IL.
Advisor: Vladimir Drinfeld

2011–2012 **MASt, Mathematics**, *University of Cambridge*, Cambridge, UK.

2007–2011 **A.M., Mathematics**, *Harvard University*, Cambridge, MA.

2007–2011 **A.B., Mathematics**, *Harvard University*, Cambridge, MA, *summa cum laude*.
Phi Beta Kappa

Fellowships and Awards

2017 Wirszup Fellowship, University of Chicago Mathematics Department

2013–2016 National Defense Science and Engineering Graduate Fellowship (NDSEG)

2011–2013 NSF Graduate Research Fellowship

2011–2012 Churchill Scholarship

2011 Herb Alexander Award, Harvard Mathematics Department

Publications

Research

8. *On an invariant bilinear form on the space of automorphic forms via asymptotics*, submitted, 2017. `arXiv:1609.00400`

7. *On the reductive monoid associated to a parabolic subgroup*, J. Lie Theory **27**(3), 637–655 (2017). `arXiv:1602.07233`

6. *On a strange invariant bilinear form on the space of automorphic forms* (with V. Drinfeld), Selecta Math. (N.S.) **22**(4), 1825–1880 (2016). `arXiv:1503.04705`

5. *Radon inversion formulas over local fields*, Math. Res. Lett. **23**(2), 535–561 (2016). `arXiv:1503.04095`

4. *A new Fourier transform*, Math. Res. Lett. **22**(5), 1541–1562 (2015). `arXiv:1402.5555`

3. *A new infinite family of minimally nonideal matrices*, Journal of Combinatorial Theory, Series A **118** (2011), 365-372

2. *Thin Lehman matrices and their graphs*, Electronic Journal of Combinatorics **17** (2010), R165

1. *The zero-divisor graph associated to a semigroup* (with L. DeMeyer, L. Greve, A. Sabbaghi), Communications in Algebra **38** (2010), 3370-3391

Other articles

1. *The moduli stack of G-bundles*, Harvard University Senior Thesis, April 2011. Advisor: Dennis Gaitsgory. `arXiv:1104.4828`

Presentations

Seminar Talks

11. University of Wisconsin–Madison, Algebraic Geometry Seminar, December 2017.

10. Rutgers University, Junior Number Theory Days, November 2017.

9. UCLA, Number Theory Seminar, November 2017.

8. California Institute of Technology, Number Theory Seminar, November 2017.

7. University of Maryland, Lie Groups and Representation Theory Seminar, October 2017.

6. University of Toronto, Number/Representation Theory Seminar, January 2017.

5. MIT, Infinite Dimensional Algebra Seminar, December 2016.

4. Yale, Algebra and Number Theory Seminar, November 2016.

3. UIUC, Algebraic Geometry Seminar, October 2016.

2. University of Chicago, Number Theory Seminar, October 2016.

1. Northwestern University, Number Theory Seminar, October 2016.

Conference Presentations

2. AMS/MAA National Meeting, January 2010.

1. AMS/MAA National Meeting, January 2009. Undergraduate Poster Session.

Outreach Talks

4. University of Chicago, Women in Math Symposium, February 2017.

3. University of Cambridge, Part III Seminar Series, March 2012.

2. Harvard College Program for Research in Science and Engineering (PRISE) Presentations, August 2010.

1. Harvard Math Table, September 2009.

Teaching

2016-17 **Lecturer**, *University of Chicago*, Chicago, IL.
Math 151-152-153 Freshman Calculus sequence. Lecture three hours weekly, hold weekly problem sessions and office hours, assign homework, and write exams. Course Evaluations: 4.25, 4.47, 4.76 (Max: 5.0)

Summer 2015-16 **Mentor**, *University of Chicago REU*, Chicago, IL.
Mentored three undergraduates each summer on diverse topics of study.

Winter 2015 **Mentor**, *University of Chicago Directed Reading Program (DRP)*, Chicago, IL.
Mentored an undergraduate in an independent study project.

2013-14 **College Fellow**, *University of Chicago*, Chicago, IL.
Math 161-162-163 Freshman Honors Calculus (IBL) sequence. Hold weekly problem sessions and office hours and grade homework.

Summer 2011 **Graduate Assistant**, *University of Minnesota Duluth REU*, Duluth, MN.
Assisted undergraduates with independent research projects in combinatorics and number theory.

Spring 2009 **Course Assistant**, *Harvard Mathematics Department*, Cambridge, MA.
Hold weekly sections and grade problem sets for upper level course in Classical Geometry.

Fall 2008 **Peer Tutor**, *Harvard Bureau of Study Counsel*, Cambridge, MA.
Tutored other Harvard students in the subjects of mathematics and computer science.