

# Jayce R. Getz

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Citizenship

USA

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## Education

PhD, Mathematics, University of Wisconsin at Madison (Advisor: Ken Ono)	August 2007
AB, Mathematics, Harvard University (with High Honors)	May 2004

## Professional Positions

Associate Professor (with tenure) Department of Mathematics, Duke University	2019–present
Assistant Professor Department of Mathematics, Duke University	2012–2019
Assistant Professor Department of Mathematics and Statistics, McGill University	2010–2012
Veblen Research Instructor Department of Mathematics, Princeton University and IAS	2007–2010

## Research Interests

Number theory: Arithmetic geometry and automorphic forms.

## Publications

- (1) (with Y. Choie) *Schubert Eisenstein series and Poisson summation for Schubert varieties*, preprint (arXiv:2107.01874).
- (2) (with C-H. Hsu and S. Leslie) *Harmonic analysis on certain spherical varieties*, submitted for publication (arXiv:2103.10261).
- (3) (with C-H. Hsu) *A summation formula for triples of quadratic spaces II*, submitted for publication (arXiv:2009.11490).
- (4) (with B. Liu) *A summation formula for triples of quadratic spaces*, Adv. Math., Vol. 347, (2019) 150–191.

- (5) (with B. Liu) *A refined Poisson summation formula for certain Braverman-Kazhdan spaces*, Sci. China Math, (2020).
- (6) *A summation formula for the Rankin-Selberg monoid and a nonabelian trace formula*, Amer. J. Math, Vol. 142, No. 5 (2020), 1371–1407.
- (7) *Secondary terms in asymptotics for the number of zeros of quadratic forms over number fields*, London Math. Soc., Vol. 98, No. 2 (2018), 275–305.
- (8) (with H. Hahn) **An introduction to Automorphic representations with a view toward Trace Formulae**, Springer GTM Series, submitted for publication  
 Webpage <https://sites.duke.edu/heekyoungahn/>
- (9) *Nonabelian Fourier transforms for spherical representations*, Pacific J. Math., Vol. 294 (2018), 351–373.
- (10) *Automorphic kernel functions in four variables*, Research in the Mathematical Sciences, Vol. 3, No 20. (2016), 1–26.
- (11) (with H. Hahn) *A general simple relative trace formula*, Pacific J. Math., Vol. 277, No 1 (2015), 99–118.
- (12) (with P. Edward Herman) *A nonabelian trace formula*, Research in the Mathematical Sciences, Vol. 2, No 14 (2015), 1–21.
- (13) (with J. Klassen) *Isolating Rankin-Selberg lifts*, Proc. Amer. Math. Soc., Vol. 143, No 8 (2015), 3319–3329.
- (14) (with H. Hahn) *Algebraic cycles and Tate classes on Hilbert modular varieties*, Int. J. Number Theory, Vol. 10, No 1 (2014), 161–176.
- (15) (with E. Wambach) *Twisted relative trace formulae with a view towards unitary groups*, American J. Math., Vol. 136, No 1 (2014), 1–57.
- (16) *An approach to non-solvable base change and descent*, J. Ramanujan Math. Soc., Vol. 27, No. 2 (2012) 143–211.
- (17) (with M. Goresky) **Hilbert modular forms with coefficients in intersection homology and quadratic base change**, Progress in Mathematics, Vol 298, Birkhäuser, 2012.
- (18) *Intersection numbers of Hecke cycles on Hilbert modular varieties*, American J. Math., Vol. 129, No. 6 (2007), 1623–1658.
- (19) (with S. Basha, H. Nover, and E. Smith) *Systems of orthogonal polynomials arising from the modular  $j$ -function*, J. Math. Anal. Appl., Vol. 289, No. 1 (2004), 336–354.
- (20) (with K. Mahlburg) *Partition identities and a theorem of Zagier*, J. Combin. Theory Seri. A, 100 (2002), 27–43.
- (21) *Extension of a theorem of Kiming and Olsson for the partition function*, Ramanujan J., Vol. 5, No. 1 (2001), 47–51.
- (22) *On congruence properties of the partition function*, Int. J. Math. Math. Sci., Vol. 23, No. 7 (2000), 493–496.

## Awards and Honors

Visiting Associate Professor, supported by the PMI (Y. Choie) POSTECH Mathematics Institute (PMI), Pohang, South Korea	Spring 2021
Visitor, supported by the EIM (D. Kazhdan) Einstein Institute of Mathematics (EIM), Jerusalem, Israel	June 2019
NSF Individual Grant, DMS-1901883 (\$290,715) Duke University	2019–2022
Visitor, supported by the EIM (D. Kazhdan) Einstein Institute of Mathematics (EIM), Jerusalem, Israel	August 2018
Member of the IAS, supported in part by C. Simonyi Endowment Institute for Advanced Study (IAS), Princeton, NJ	Spring 2018
Visiting Scholar, supported in part by the KIAS (Y-S Choi) Korea Institute for Advanced Study (KIAS), Seoul, Korea	August 2016
NSF Individual Grant, DMS-1405708 (\$153,000) Duke University	2014–2018
Joint Winner of the Ferran Sunyer i Balaguer Prize (€15,000) Barcelona, Spain (with Mark Goresky at IAS)	2011
NSERC Discovery Grant (\$85,000) McGill University	2010–2015
NSF Postdoctoral Research Fellowship (\$108,000) Princeton University and IAS	2007–2010
Excellence in Mathematical Research Award (\$400) Department of Mathematics, University of Wisconsin at Madison	2007
NDSEG Fellowship (\$84,000) University of Wisconsin at Madison	2004–2007
Phi Beta Kappa member Harvard University	2004
Dean's List, Rank I (highest ranking) Harvard University	2000–2004
Detur Book Prize Harvard University	2002
Intel Science Talent Search (\$75,000) 2nd place	2000
Karl Menger Memorial Award International Science and Engineering Fair (administered by the AMS)	2000
International Science and Engineering Fair 2nd place overall	2000
International Science and Engineering Fair 1st place in Mathematics	2000

## Postdocs Mentored

Winston Spencer Leslie	2018–present
Duke University (NSF postdoc)	
Michael Lipnowski (now at McGill)	2013–2016
Duke University	
Fritz Hoermann (now at Universität Freiburg)	2010–2011
McGill University	

## Graduate Students Supervised

*TBA*

Chun-Hsien Hsu, PhD Candidate, Duke University	Fall 2019–present
<i>Automorphic-twisted summation formulae for pairs of quadratic spaces</i>	
Miao (Pam) Gu, PhD Candidate, Duke University	Fall 2018–present
<i>Twisted relative endoscopy for unitary groups</i>	
Chung-Ru Lee, PhD Candidate, Duke University	Fall 2016–present
<i>Secondary terms in asymptotics for the number of zeros of quadratic forms in an odd number of variables</i>	
Huong Tran, PhD, Duke University	Fall 2015–Spring 2020
<i>The relative Hitchin filtration and relative endoscopy</i>	
Jason Polák, PhD, McGill University	Fall 2011–Spring 2016
<i>Stratifications of Shimura varieties</i> (co-supervised with E. Goren)	
Amy Cheung Woodling, PhD, McGill University	Fall 2011–Spring 2016
<i>A relative fundamental lemma for <math>U(4)</math></i>	
Maxime Turgeon, MS, McGill University	Fall 2011–Spring 2013

## Undergraduate Students Supervised

Lucas Fagan, Craig Fiedorek, Diego Sosa-Fundora, Tony Sun, Henry Zhang	
DOmath2019 program, Duke University	Summer 2019
Trung Can, Ben Nativi, Gary Zhou	
DOmath2017 program, Duke University	Summer 2017
Josh Izzard	
PRUV program, Duke University	May 2013–Apr 2014
Jamie Klassen	
McGill University	Summer 2012

## Highschool Students Supervised

Nolan Miranda	May 2016–Aug 2016
Angela Deng	May 2014–Dec 2015
Erik Anderson	2010–2011

## Invited Talks

<i>TBA</i>	Nov 2021
Basic Functions, Orbital Integrals, and Beyond Endoscopy, BIRS	
<i>TBA</i>	Sep 2021
Algebra and Number Theory Day, Johns Hopkins University	
<i>Harmonic analysis on certain spherical varieties</i>	July 2021
Galois Representations and Automorphic Forms, MCA 2021 (Virtual)	
<i>Harmonic analysis on certain spherical varieties</i>	May 2021
Relative Aspects of the Langlands Program, $L$ -functions, and Beyond Endoscopy, CIRM (Virtual)	
<i>New Avenues for the Circle Method (4 talks)</i>	May 2021
The Circle Method: Entering its Second Century, HCM (Virtual)	
<i>Harmonic analysis on certain spherical varieties</i>	Apr 2021
Representation Theory and Number Theory Seminar, NUS (Virtual)	
<i>Harmonic analysis on certain spherical varieties</i>	Mar 2021
Recent Developments in Automorphic Representations, AMS Session (Virtual)	
<i>A Poisson summation formula for triples of quadratic spaces</i>	Nov 2020
Colloquium, Department of Mathematics, POSTECH (Virtual)	
<i>A Poisson summation formula for triples of quadratic spaces</i>	Oct 2020
Trends in Arithmetic Geo. and Rep. Theory, KMS Special Session (Virtual)	
<i>Summation formulae and triple product <math>L</math>-functions</i>	Oct 2020
Number Theory Seminar, POSTECH Math Institute (Virtual)	
<i>On triple product <math>L</math>-functions</i>	May 2020
Joint Number Theory Seminar, Princeton and the IAS (Virtual)	
<i>On triple product <math>L</math>-functions</i>	May 2020
Number Theory Seminar, UCLA (Virtual)	
<i>On triple product <math>L</math>-functions</i>	Apr 2020
Number Theory and Representation Theory, University of Wisconsin (Virtual)	
<i>Summation formulae for triples of quadratic forms</i>	Mar 2019
Hawaii Number Theory Conference, University of Hawaii at Manoa	
<i>Secondary terms for the number of solutions of quadratic forms</i>	Jan 2019
On Counting Methods in Number Theory, Joint AMS-MAA meeting, Baltimore	
<i>On triple product <math>L</math>-functions</i>	Jan 2019
On the Langlands Program: Endoscopy and Beyond, IMS-NUS, Singapore	
<i>On triple product <math>L</math>-functions</i>	Dec 2018
BC-MIT number theory seminar, Boston College	
<i>Proving summation formulae for spherical varieties (3 talks)</i>	Sep 2018
Workshop on $L$ -functions, Langlands functoriality and Trace formula, including relative aspects, Porquerolles, France	

- Summation formulae for triples of quadratic forms* June 2018  
 Geometric Representation Theory and the Langlands Program,  
 Joint AMS-CMS Meeting, Fudan University, China
- Summation formulae and speculations on period integrals attached to triples of automorphic representations* May 2018  
 Number Theory Seminar, Northwestern University
- Summation formulae and speculations on period integrals attached to triples of automorphic representations* Apr 2018  
 Number Theory Seminar, University of British Columbia, Vancouver, Canada
- Summation formulae and speculations on period integrals attached to triples of automorphic representations* Mar 2018  
 Joint Number Theory Seminar, Princeton University and the IAS
- Summation formulae and speculations on period integrals attached to triples of automorphic representations* Mar 2018  
 Lie Groups Seminar, Cornell University
- Summation formulae and speculations on  $L$ -functions attached to triples of automorphic representations* Feb 2018  
 Joint Number Theory Seminar, Columbia, CUNY, NYU
- New families of period integrals for general linear groups* Feb 2018  
 Automorphic Forms and Representation Theory Seminar, Purdue University
- A summation formula for triples of quadratic spaces* Nov 2017  
 Group, Lie and Number Theory Seminar, University of Michigan
- A summation formula for triples of quadratic spaces* Nov 2017  
 Algebra and Number Theory Seminar, Yale University
- A summation formula for triples of quadratic spaces* Aug 2017  
 Automorphic Forms and Related Topics, Vietnam IASM (VIASM), Ha Long
- Summation formula for the Rankin-Selberg monoid via the circle method* May 2017  
 Harmonic analysis and the trace formula, MFO, Oberwolfach, Germany
- Summation formula for the Rankin-Selberg monoid via the circle method* May 2017  
 Automorphic forms and related topics, AMS Special Session, Hunter College
- Summation formula for the Rankin-Selberg monoid via the circle method* Feb 2017  
 Automorphic Forms and Representation Theory Seminar, Purdue University
- Triple product  $L$ -functions and limiting forms of trace formulae* Aug 2016  
 Number Theory Seminar, Korea Institute for Advanced Study (KIAS), Korea
- The Langlands Functoriality Conjecture* Aug 2016  
 Department Colloquium, Sookmyung Women's University, Seoul, Korea
- Triple product  $L$ -functions and limiting forms of trace formulae* Aug 2016  
 Number Theory Seminar, Yonsei University, Seoul, Korea

<i>Triple product L-functions and limiting forms of trace formulae</i> Number Theory and Algebraic Geometry Seminar, Boston College	Mar 2016
<i>Triple product L-functions and limiting forms of trace formulae</i> Langlands Program Seminar, CUNY Graduate Center	Mar 2016
<i>Triple product L-functions and limiting forms of trace formulae</i> Automorphic Forms Workshop, Wake Forest University	Mar 2016
<i>Four-variable automorphic kernel functions</i> Illinois Number Theory Conference, UIUC	Aug 2015
<i>Remarks on a paper of Frenkel, Langlands and Ngo</i> Workshop on $L$ -functions and trace formula, Purdue University	May 2015
<i>Descent and base change with a view towards the Artin conjecture</i> Department Colloquium, Emory University	Jan 2015
<i>A nonabelian trace formula</i> ELEFANT workshop, Hausdorff Center, Bonn, Germany	July 2014
<i>A nonabelian trace formula</i> Special Seminar, University of Chicago	Dec 2013
<i>An approach to nonsolvable base change for <math>GL(2)</math></i> Lie Theory Seminar, University of Minnesota	Apr 2013
<i>An approach to nonsolvable base change for <math>GL(2)</math></i> Number Theory Seminar, University of South Carolina	Dec 2012
<i>An approach to nonsolvable base change for <math>GL(2)</math></i> Athens and Atlanta Number Theory Day, Emory University	Oct 2012
<i>An approach to nonsolvable base change for <math>GL(2)</math></i> Midwest Number Theory Day, UIUC	Oct 2012
<i>An approach to nonsolvable base change for <math>GL(2)</math></i> Number Theory Seminar, Harvard University	Apr 2012
<i>Hilbert modular forms with coefficients in intersection homology</i> SAGG, Laval University	Mar 2012
<i>An approach to nonsolvable base change and descent</i> Department Colloquium, Duke University	Feb 2012
<i>An approach to nonsolvable base change and descent</i> Department Colloquium, University of Maryland	Jan 2012
<i>An approach to nonsolvable base change and descent</i> Department Colloquium, Johns Hopkins University	Jan 2012
<i>An approach to nonsolvable base change and descent</i> Department Colloquium, Cornell University	Nov 2011
<i>Distinction, special cycles, and twisted relative trace fomulae</i> Number Theory Seminar, University of Chicago	May 2011

<i>Twisted relative endoscopy</i>	Mar 2011
Number Theory and Algebraic Geometry Seminar, Yale University	
<i>Relative endoscopy and arithmetic of Shimura varieties</i>	Oct 2010
Number Theory Seminar, Kyoto University	
<i>Relative endoscopy and arithmetic geometry of Shimura varieties (3 talks)</i>	Oct 2010
Special values of $L$ -functions and arithmetic geometry, Miyama, Kyoto, Japan	
<i>Elliptic descent of global orbital integrals</i>	July 2010
Canadian Number Theory Association XI, Acadia University	
<i>Twisted relative trace formulae</i>	Oct 2009
Lie theory Seminar, Cornell University	
<i>Twisted relative trace formulae with applications to unitary groups</i>	Feb 2009
Algebraic Geometry and Number Theory Seminar, Johns Hopkins University	
<i>Trace formulae and locally symmetric spaces</i>	Jan 2009
Department Colloquium, Boston College	
<i>Trace formulae and locally symmetric spaces</i>	Dec 2008
Department Colloquium, McGill University	
<i>Twisted relative trace formulae with applications to unitary groups</i>	Dec 2008
Québec-Vermont Number Theory Seminar, McGill University	
<i>Trace formulae and locally symmetric spaces</i>	Dec 2008
Members Seminar, Institute for Advanced Study (IAS)	
<i>Twisted relative trace formulae with applications to unitary groups</i>	Nov 2008
Shimura Varieties and Trace Formula Seminar, IAS	
<i>Twisted relative trace formulae with applications to unitary groups</i>	Nov 2008
Number Theory and Representation Theory Seminar, University of Toronto	
<i>Twisted relative trace formulae with applications to unitary groups</i>	Nov 2008
Number Theory Seminar, McMaster University	
<i>Twisted relative trace formulae with applications to unitary groups</i>	Sep 2008
Number Theory Seminar, University of Maryland	
<i>Twisted relative trace formulae with applications to unitary groups</i>	Sep 2008
Automorphic Forms and Number Theory Seminar, University of Minnesota	
<i>Twisted relative trace formulae</i>	Sep 2008
Colloquium, University of Minnesota	
<i>Twisted relative trace formulae with a view towards unitary groups</i>	May 2008
Locally Symmetric Spaces, Banff International Research Station	
<i>Jacquet-Langlands transfer and distinction</i>	Feb 2008
Number Theory Seminar, UCLA	
<i>Jacquet-Langlands transfer and distinction</i>	Feb 2008
Number Theory Seminar, Caltech	

<i>Relative trace formulae with a view towards Shimura varieties</i>	Feb 2008
Number Theory and Representation Theory Seminar, University of Michigan	
<i>Hilbert modular forms with coefficients in intersection homology</i>	Nov 2007
Algebra and Number Theory Seminar, Penn State University	
<i>Hilbert modular forms with coefficients in intersection homology</i>	Oct 2007
Algebraic Geometry Seminar, Duke University	
<i>Hilbert modular forms with coefficients in intersection homology</i>	Sep 2007
Joint Number Theory Seminar, Princeton University and IAS	
<i>Hilbert modular forms with coefficients in intersection homology</i>	May 2007
Algebraic Geometry Seminar, University of Chicago	
<i>Hilbert modular forms with coefficients in intersection homology</i>	Mar 2007
Number Theory and Representation Theory Seminar, University of Toronto	
<i>Hilbert modular forms with coefficients in intersection homology</i>	Mar 2007
Automorphic Forms Seminar, University of Minnesota	
<i>Hilbert modular forms with coefficients in intersection homology</i>	Feb 2007
Number Theory Seminar, Boston College	
<i>Intersection homology theory of Hilbert modular varieties</i>	Jan 2007
Mathematics Seminar, Johns Hopkins University	
<i>Hilbert modular forms with coefficients in intersection homology</i>	Nov 2006
Automorphic Forms and Representation Theory Seminar, Purdue University	
<i>Hilbert modular forms with coefficients in intersection homology</i>	Oct 2006
Number Theory Seminar, The Ohio State University	
<i>Hilbert modular forms with coefficients in intersection homology</i>	July 2006
Arithmetic Geometry Seminar, Humboldt University, Germany	
<i>Hilbert modular forms with coefficients in intersection homology</i>	Apr 2006
Computational Arithmetic Geometry, AMS Special Session, San Francisco, CA	
<i>Hilbert modular forms with coefficients in intersection homology</i>	Apr 2006
Combinatorics, Algebra and Number Theory Seminar, Iowa State University	
<i>Hilbert modular forms with coefficients in intersection homology</i>	Jan 2006
Arithmetic Geometry and Modular Forms, AMS Special Session, San Antonio, TX	
<i>Introduction to intersection homology</i>	Jan 2006
Mathematics Seminar, Osaka University	
<i>Hilbert modular forms with coefficients in intersection homology</i>	Jan 2006
Automorphic representations, L-functions, and Periods, RIMS, Kyoto, Japan	
<i>Hilbert modular forms with coefficients in intersection homology</i>	Dec 2005
Intersection of Arithmetic Cycles and Automorphic Forms, CRM	
<i>Hilbert modular forms with coefficients in intersection homology</i>	Nov 2005
Number Theory Seminar, Johns Hopkins University	

<i>Hilbert modular forms with coefficients in intersection homology</i> Number Theory Seminar, Brown University	Nov 2005
<i>Hilbert modular forms with coefficients in intersection homology</i> Number Theory Seminar, UCLA	Oct 2005
<i>Intersection numbers of Hecke cycles on Hilbert modular varieties</i> NSF Focused Research Group workshop, University of Maryland	Oct 2005
<i>Intersection numbers of Hecke cycles on Hilbert modular varieties</i> Number Theory Seminar, University of Rochester	Mar 2005
<i>Intersection numbers of Hecke cycles on Hilbert modular varieties</i> Number Theory Seminar, University of Wisconsin	Feb 2005
<i>Classical and <math>p</math>-adic modular forms arising from the Borcherds exponents of other modular forms</i> Joint Trivial Notions and Modular Seminar, Harvard University	Apr 2004
<i>Systems of orthogonal polynomials arising from the modular <math>j</math>-function</i> Continued Fractions, AMS Special Session, Phoenix, AZ	Jan 2004
<i>Systems of orthogonal polynomials arising from the modular <math>j</math>-function</i> Modular Curves Seminar, Harvard University	Sep 2003
<i>Systems of orthogonal polynomials arising from the modular <math>j</math>-function</i> Number Theory Seminar, University of Wisconsin	July 2003
<i>A generalization of a theorem of Rankin and Swinnerton-Dyer on zeros of modular forms</i> Number Theory Seminar, University of Wisconsin	July 2002
<i>Partition identities and a theorem of Zagier</i> Modular Forms Seminar, Harvard University	Nov 2001
<i>Partition identities and a theorem of Zagier</i> Math Table Seminar, Harvard University	Nov 2001
<i>Partition identities and a theorem of Zagier</i> Number Theory Seminar, University of Wisconsin	July 2001

## Other Talks and Lectures

<i>Summation formula for spherical varieties</i> Number Theory Seminar, Duke University	Sep 2018
<i>An invitation to modern number theory via elliptic curves</i> Summer Workshop in Math for female high school students, Duke University	June 2018
<i>An approach to nonsolvable base change for <math>GL(2)</math></i> Graduate & Faculty Seminar, Duke University	Feb 2013
<i>Intersection homology for Hilbert modular varieties</i> Montreal-Toronto Meeting on Hilbert modular varieties, Fields Institute	Apr 2011

<i>Relative endoscopy and arithmetic of Shimura varieties</i>	Sep 2010
Montreal-Toronto Meeting on Arithmetic of Shimura varieties, CRM	
<i>Hilbert modular forms with coefficients in intersection homology</i>	Oct 2006
Midwest Number Theory Conference IV, UIUC	
<i>Hilbert modular forms with coefficients in intersection homology</i>	July 2006
Recent Developments in the Arithmetic of Shimura Varieties and Arakelov Geometry, CRM, Bellaterra, Spain	
<i>Intersection numbers of Hecke cycles on Hilbert modular varieties</i>	Nov 2005
Midwest Number Theory Conference III, University of Wisconsin	
<i>Intersection numbers of Hecke cycles on Hilbert modular varieties</i>	Apr 2005
ArithmeTexas, Texas A&M	
<i>Intersection numbers of Hecke cycles on Hilbert modular varieties</i>	Mar 2005
19th Annual Automorphic Forms Workshop, UTexas at Denton	
<i>Intersection numbers of Hecke cycles on Hilbert modular varieties</i>	Feb 2005
Midwest Number Theory Conference II, UIUC	
<i>Systems of orthogonal polynomials arising from the modular <math>j</math>-function</i>	Nov 2004
Additive Number Theory Conference, University of Florida	
<i>Systems of orthogonal polynomials arising from the modular <math>j</math>-function</i>	Sep 2003
Big Sky Conference on Discrete Math, University of Montana	

## Professional Service

Faculty Leader for DOMath2019 program	
Duke University	Summer 2019
Co-Organizer of AMS session on Recent developments in Automorphic Forms	
University of Hawaii, Manoa	Mar 2019
Pure ARP Search Committee	
Duke University	Jan 2018
Faculty Leader for DOMath2017 program	
Duke University	Summer 2017
Member of Graduate Admission Committee	
Department Mathematics, Duke University	2016–2017
Co-Organizer of AIM Workshop on Automorphic Kernel Functions	
American Institute of Mathematics	Nov 30–Dec 4, 2015
Pure ARP Search Committee	
Duke University	Jan 2015
Co-Organizer of AMS Session on Automorphic Forms and Related Topics	
University of North Carolina at Greensboro	Nov 2014
Co-Founder and Co-Organizer of UNC-Duke Number Theory Seminar	
Duke University	2012–present

Organizer of Algebraic Geometry Seminar Duke University	Fall 2012–present
Pure ARP Search Committee Duke University	Jan 2013
Member of Teaching Awards Committee McGill University	Fall 2011–Winter 2012
Member of Computing and Equipment Committee McGill University	Winter 2010
Co-Organizer of Québec-Vermont Number Theory Seminar McGill University	Fall 2010–Winter 2012
Co-Organizer of the Bellairs Workshop in Number Theory Barbados	May 2011
Co-Organizer of CRM-ISM Colloquium McGill University	Fall 2010–Winter 2011
Co-Organizer of Joint Number Theory Seminar Princeton University and IAS	Fall 2007–Fall 2009
Reviewer for NSF grant proposals	
Reviewer for NSA grant proposals	
Refereeing work	
Advances in Mathematics	
Algebra and Number Theory	
American Journal of Mathematics	
Bulletin of the London Mathematical Society	
Canadian Mathematical Bulletin	
Compositio Mathematica	
Documenta Mathematica	
Duke Mathematical Journal	
Forum Mathematicum	
International Journal of Number Theory	
Journal of the Mathematical Society of Japan	
Journal of Algebra and its Applications	
Mathematische Zeitschrift	
Mathematische Annalen	
Pacific Journal of Mathematics	
Proceedings of the American Mathematical Society	
Science China Mathematics	
Transactions of the American Mathematical Society	

## Further Activities

The 45th KAST International Symposium: Periods of Automorphic Forms	
Participant, Korean Academy of Science and Technology (Virtual)	Feb 2021
Conference on Representation Theory and Algebraic Analysis	
Participant, Weizmann Institute of Science (Virtual)	May 2020
The Sixth Abel Conference: A mathematical celebration of Langlands	
Invited participant, IMA, University of Minnesota, Twin City	Nov 2018
Representation Theory and Analysis in Locally Symmetric Spaces	
Participant, Institute for Advanced Study	Mar 2018
Functoriality and the Trace Formula	
Invited participant, American Institute of Mathematics	Dec 2017
Mod $p/p$ -adic Langlands Programs	
Participant, Korea Institute for Advanced Study (KIAS)	Aug 2016
Analysis, Spectra and Number Theory (in honor of Peter Sarnak)	
Participant, Princeton University and IAS	Aug 2016
Greater Metropolitan New York Math Fair	
Judge, Brooklyn Technical High School	Mar 2009
The Stable Trace Formula, Automorphic Forms, and Galois Representations	
Participant, Banff International Research Station	Aug 2008
Recent Developments in Number Theory: Selmer Groups, $L$ -functions, and Galois Deformations	
Participant, UCLA	Mar 2008
The Tate Conjecture	
Participant, American Institute of Mathematics	July 2007
Automorphic Galois Representations, $L$ -functions and Arithmetic	
Participant, Columbia University	June 2006
Advanced Course on Arakelov Geometry and Shimura Varieties	
Participant, CRM, Barcelona, Spain	Feb 2006
NSF Give a Day, Make a Difference Outreach	
Invited panelist with Leon Lederman (1988 Nobel Laureate in Physics) and Ken Ono, Missoula, MT	May 2004
Research Experience for Undergraduates in Number Theory	
Participant, University of Wisconsin	Summer 2003
CBMS–The Web of Modularity	
Participant, UIUC	June 2003
Math Tutor and general instructor of the After School Program	
Peabody Middle School	Fall 2002, Fall 2003, Spring 2004
Exchange Student in Mathematics	
Budapest Semesters in Mathematics	Spring 2003

International Mathematics Olympiad Awards Ceremony	
Student research invited speaker, Washington, DC	July 2001
NSF 50 Scientists and Engineers in the Schools Outreach	
Invited panelist with Leon Lederman (1988 Nobel Laureate in Physics)	
and Ken Ono, Missoula, MT	May 2001
Honored by Japanese American Citizens League for work memorializing the unjust internment of Japanese Americans during World War II	
Missoula, MT	2000