Samit Dasgupta

Professor of Mathematics

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Employment

2018–present	**Duke University**, *Professor*.
2016–2018	**University of California, Santa Cruz**, *Professor*.
2012–2016	**University of California, Santa Cruz**, *Associate Professor*.
2008–2012	**University of California, Santa Cruz**, *Assistant Professor*.
2004–2008	**Harvard University**, *Benjamin Peirce Assistant Professor*, *National Science Foundation Postdoctoral Research Fellow*.

Outside Appointments

2018 Summer	**University of Regensburg and Oberwolfach Research Institute for Mathematics**, *Simons Visiting Professor*.
2017 Fall	**Institut Henri Poincaré**, *Professor*, Research in Paris program (with P. Charollois and M. Spiess).
2015 Fall	**Université Pierre et Marie Curie, Paris VI, Jussieu**, *Professeur Invité*.

Education

2000–2004	**University of California, Berkeley**, *Ph.D. in Mathematics*, May 2004, Advisor: Prof. Kenneth Ribet.
1995–1999	**Harvard University**, *A.B. in Mathematics*, June 1999, *summa cum laude*.

Grants/Awards

2023	**Frontiers of Science Award**, *joint with Mahesh Kakde and Kevin Ventullo*, International Congress of Basic Science, Beijing, China, $25,000.
2022–2027	**National Science Foundation**, DMS 2200787, $550,000.
2019–2022	**National Science Foundation**, DMS 1901939, $186,004.
2016–2019	**National Science Foundation**, DMS 1600943, $159,000.
2015–2016	**National Security Agency**, MSP Grant H98230-15-1-0321, $40,000.
2010–2015	**National Science Foundation**, CAREER Grant 0952251, $471,283.
2009–2012	**National Science Foundation**, DMS 0900924, $150,000.
2009–2011	**Sloan Research Fellowship**, $50,000.

Distinguished/Plenary Lectures

2022 **Quebec–Maine Number Theory Conference**, *plenary lecture*, Laval University.

2022 **International Congress of Mathematicians**, *invited speaker, Number Theory section*, joint with Mahesh Kakde.

2022 **Britton Distinguished Lecturer**, McMaster University.

2022 **Distinguished Lecture Series of the Mathematics Consortium of India**, ICTS Bangalore.

Publications

[40] Samit Dasgupta, Mahesh Kakde, and Jesse Silliman. "On The Equivariant Tamagawa Number Conjecture". Preprint.

[39] Samit Dasgupta et al. "The Brumer–Stark Conjecture over $\mathbf{Z}$". Preprint, arXiv:2310.16399.

[38] Samit Dasgupta et al. "The Residually Indistinguishable Case of Ribet's Method for $\mathbf{GL}_2$". Preprint, arXiv:2310.16396.

[37] Samit Dasgupta. "On Constructing Extensions of Residually Isomorphic Characters". Preprint, arXiv:2310.16631.

[36] Samit Dasgupta. "Ranks of Matrices of Algebraic Numbers I: the Theorems of Baker and Waldschmidt–Masser". Preprint, arXiv:2303.02037.

[35] Benedict Gross and Samit Dasgupta. "Two Encounters with the p-adic Stark Conjecture". Preprint, arXiv:2303.03299.

[34] Samit Dasgupta and Matthew Honnor. "On the Equality of Three Formulas for Brumer–Stark Units". Preprint, arXiv:2211.01715.

[33] Samit Dasgupta and Mahesh Kakde. "On the Brumer–Stark Conjecture and Refinements". To appear in Proceedings of the 2022 ICM, arXiv:2204.09037.

[32] Samit Dasgupta and Mahesh Kakde. "Brumer–Stark Units and Explicit Class Field Theory". *Duke Mathematical Journal*, to appear, arXiv:2103.02516.

[31] Samit Dasgupta and Mahesh Kakde. "Trivial Zeroes in the Iwasawa Main Conjecture". To appear in Proceedings of the Colloquium on Arithmetic Geometry, Tata Institute of Fundamental Research, Mumbai, India, 2020.

[30] Samit Dasgupta and Mahesh Kakde. "On the Brumer–Stark Conjecture". *Annals of Mathematics*, **197** (2023), no. 1, pp. 289–388.

[29] Samit Dasgupta and Mahesh Kakde. "On Constant Terms of Eisenstein Series". *Acta Arithmetica*, **200** (2021), no. 2, pp. 119–147. to appear, arxiv:2010.00657.

[28] Samit Dasgupta and Mahesh Kakde. "On the rank one Gross-Stark conjecture for quadratic extensions and the Deligne-Ribet q-expansion principle". *Development of Iwasawa theory—the centennial of K. Iwasawa's birth.* Vol. 86. Adv. Stud. Pure Math. Math. Soc. Japan, Tokyo, 2020, pp. 243–254.

[27] Samit Dasgupta and Michael Spiess. "On the characteristic polynomial of the Gross regulator matrix". *Transactions of the American Mathematical Society*, **372** (2019), no. 2, pp. 803–827.

[26] Samit Dasgupta, Mahesh Kakde, and Kevin Ventullo. "On the Gross–Stark conjecture". *Annals of Mathematics*, **188** (2018), no. 3, pp. 833–870.

[25] Samit Dasgupta and John Voight. "Sylvester's problem and mock Heegner points". *Proceedings of the American Mathematical Society*, **146** (2018), no. 8, pp. 3257–3273.

[24] Samit Dasgupta and Michael Spieß. "Partial zeta values, Gross's tower of fields conjecture, and Gross–Stark units". *Journal of the European Mathematical Society (JEMS)*, **20** (2018), no. 11, pp. 2643–2683.

[23] Samit Dasgupta and Michael Spieß. "The Eisenstein cocycle and Gross's tower of fields conjecture". *Annales Mathématiques du Québec*, **40** (2016), no. 2, pp. 355–376.

[22] Samit Dasgupta. "Factorization of p-adic Rankin L-series". *Inventiones Mathematicae*, **205** (2016), no. 1, pp. 221–268.

[21] Pierre Charollois, Samit Dasgupta, and Matthew Greenberg. "Integral Eisenstein cocycles on $\mathbf{GL}_n$, II: Shintani's method". *Commentarii Mathematici Helvetici*, **90** (2015), no. 2, pp. 435–477.

[20] Massimo Bertolini et al. "p-adic L-functions and Euler systems: a tale in two trilogies". *Automorphic forms and Galois representations. Vol. 1.* Vol. 414. London Mathematical Society Lecture Note Series. Cambridge University Press, Cambridge, 2014, pp. 52–101.

[19] Joël Bellaïche and Samit Dasgupta. "The p-adic L-functions of evil Eisenstein series". *Compositio Mathematica*, **151** (2015), no. 6, pp. 999–1040.

[18] Pierre Charollois and Samit Dasgupta. "Integral Eisenstein cocycles on $\mathbf{GL}_n$, I: Sczech's cocycle and p-adic L-functions of totally real fields". *Cambridge Journal of Mathematics*, **2** (2014), no. 1, pp. 49–90.

[17] Samit Dasgupta. "A conjectural product formula for Brumer-Stark units over real quadratic fields". *Journal of Number Theory*, **133** (2013), no. 3, pp. 915–925.

[16] Samit Dasgupta and Matthew Greenberg. "$\mathscr{L}$-invariants and Shimura curves". *Algebra & Number Theory*, **6** (2012), no. 3, pp. 455–485.

[15] Samit Dasgupta, Henri Darmon, and Robert Pollack. "Hilbert modular forms and the Gross–Stark conjecture". *Annals of Mathematics*, **174** (2011), no. 1, pp. 439–484.

[14] Samit Dasgupta and Alison Miller. "A Shintani-type formula for Gross-Stark units over function fields". *The University of Tokyo. Journal of Mathematical Sciences*, **16** (2009), no. 3, pp. 415–440.

[13] Samit Dasgupta and John Voight. "Heegner points and Sylvester's conjecture". *Arithmetic geometry.* Vol. 8. Clay Mathematics Proceedings. American Mathematial Society, Providence, RI, 2009, pp. 91–102.

[12] Samit Dasgupta and Jeremy Teitelbaum. "The p-adic upper half plane". *p-adic geometry*. Vol. 45. University Lecture Series. American Mathematical Society, Providence, RI, 2008, pp. 65–121.

[11] Samit Dasgupta. "Shintani zeta functions and Gross–Stark units for totally real fields". *Duke Mathematical Journal*, **143** (2008), no. 2, pp. 225–279.

[10] Massimo Bertolini, Henri Darmon, and Samit Dasgupta. "Stark-Heegner points and special values of L-series". *L-functions and Galois representations*. Vol. 320. London Mathematical Society Lecture Note Series. Cambridge University Press, Cambridge, 2007, pp. 1–23.

[9] Samit Dasgupta. "Computations of elliptic units for real quadratic fields". *Canadian Journal of Mathematics*, **59** (2007), no. 3, pp. 553–574.

[8] Henri Darmon and Samit Dasgupta. "Elliptic units for real quadratic fields". *Annals of Mathematics*, **163** (2006), no. 1, pp. 301–346.

[7] Samit Dasgupta. "Stark-Heegner points on modular Jacobians". *Annales Scientifiques de l'École Normale Supérieure*, **38** (2005), no. 3, pp. 427–469.

[6] Henri Darmon and Samit Dasgupta. "Unités elliptiques, corps quadratiques réels, et une formule limite de Kronecker", **28** (2004), no. 1-2.

[5] Samit Dasgupta. "Gross-Stark units, Stark-Heegner points, and class fields of real quadratic fields". PhD thesis. University of California, Berkeley, 2004.

[4] Samit Dasgupta et al. "Transversals of additive Latin squares". *Israel Journal of Mathematics*, **126** (2001), pp. 17–28.

[3] Daniel K. Biss and Samit Dasgupta. "A presentation for the unipotent group over rings with identity". *Journal of Algebra*, **237** (2001), no. 2, pp. 691–707.

[2] Samit Dasgupta. "On the size of minimum super Arrovian domains". *SIAM Journal on Discrete Mathematics*, **12** (1999), no. 4, pp. 524–534.

[1] Samit Dasgupta. "Stark's Conjectures". Undergraduate honors thesis. Harvard University, 1999.

Professional Activities

Editorial Boards

2017–present **Algebra & Number Theory**.
2021–present **International Mathematics Research Notices**.
2019–present **Research in the Mathematical Sciences**.
2019–present **Research in Number Theory**.

Refereeing

Referee for dozens of journals including *Annals, Inventiones, JAMS, DMJ, JEMS, ANT, Math Annalen, IMRN, Documenta, AJM, MRL, Compositio, Crelle, JNT, Proc AMS, Trans AMS*.

Conference Organization

August 2025   **Arithmetic Cycles, Modular Forms, and L-functions**, *Montreal, Canada*, with Francesc Castella, Adrian Iovita, Antonio Lei, Alicia Pozzi, Giovanni Rosso, and Jan Vonk.

June 2024   **Modular Forms, L-functions, and Eigenvarieties**, *Paris, France*, with John Bergdall, Pierre Charollois, Gaëtan Chenevier, Mladen Dimitrov, and Anna Medvedovsky.

2010–2017   **Bay Area Algebraic Number Theory and Arithmetic Geometry Days**, *twice yearly conference rotating between University of California Santa Cruz, Stanford University, and University of California Berkeley*, with Brian Conrad, Akshay Venkatesh, and Kenneth Ribet.

Oct 2011   **Cycles on Modular Varieties**, *Banff International Research Station, Banff, Canada*, with Pierre Charollois, Matthew Greenberg, and Benedict Gross.

Jun 2008   **Workshop on Modular Forms and Arithmetic**, *University of California, Berkeley and the Mathematical Sciences Research Institute*, with Frank Calegari, Bjorn Poonen, and Richard Taylor.

Nov 2005   **Gathering on Stark's Conjectures**, *Centre de Recherches Mathématiques, Montreal, QC*, with Pierre Charollois and Henri Darmon.

Graduate Mini-Courses

Sep 2022   **Ribet's Method**, *School on Arithmetic Geometry, University of Essen, Germany*.

Aug 2022   **The Brumer Stark Conjecture and Refinements**, *ICTS Summer School on Elliptic Curves and the Special Values of L-functions, TIFR, India*, participated online, joint with Mahesh Kakde.

Jul 2022   **Ribet's Method**, *A Pair of Automorphic Workshops, University of Oregon*, participated online.

Jun 2021   **An Introduction to Transcendence Theory**, *Summer School on Polynomial Methods, Haussdorff Research Institute for Mathematics, Bonn, Germany*.

Mar 2011   **The Rank One Abelian Stark Conjecture**, *Arizona Winter School, University of Arizona*, with Matthew Greenberg.
Lecture notes: `https://www.math.arizona.edu/~swc/aws/2011/index.html`

Mar 2007   **The p-adic Upper Half-Plane**, *Arizona Winter School, University of Arizona*, with Jeremy Teitelbaum.
Lecture notes: `https://www.math.arizona.edu/~swc/aws/2007/notes.html`

Grant Panels

Served on review panels for National Science Foundation, National Security Agency Mathematical Sciences Program, EPSRC (EU), NSERC (Canada).

University Level Service Committees (UC Santa Cruz)

2014–15   **Planning Task Force (Committee to write strategic plan for UCSC)**, *Member*, Group leader for concept paper on "Communication and Reputation of the University".

2013–14   **Committee on Faculty Welfare**, *Member*.

2013–14   **Committee on Faculty Welfare Liaison to Transportation Advisory Committee**.

2012–13   **Committee on Faculty Welfare**, *Member.*

Mentoring and Student Advising

Postdoctoral Advisees

Jesse Silliman, Fall 2019–Spring 2023.

Jiuya Wang, Fall 2020–Spring 2021.

George Ander Steele, Fall 2015–Spring 2017.

Cameron Franc, Fall 2011–Spring 2014.

Graduate Students

Shawn Tsosie, Ph.D. December 2018, *On the Compatibility of Two Conjectures Concerning p-adic Gross–Stark Units.*

Joe Ferrara, Ph.D. June 2018, *Stark's Conjectures for p-adic L-functions.*

Mitchell Owen, Ph.D. June 2015, *Families of Half-Integer Weight Eisenstein Series.*

Alex Beloi, Ph.D. December 2015, *Shintani's method: Zeta values and Stark units.*

Michael Daub (informal advisor), UC Berkeley, Ph.D. May 2013, *Complex and p-adic Computations of Chow–Heegner Points.*

Undergraduate Senior Theses Advised

2012–13   **Jonathan Siegel**, *CM Elliptic Curves.*

2012–13   **Tomoaki Mizoguchi**, *Rational Points on Elliptic Curves and the Birch and Swinnerton-Dyer Conjecture.*

2009-10   **Jennifer Glover**, *Hilbert's Nullstellensatz.*

2007-08   **Alison Miller**, *Explicit class field theory in function fields: Gross–Stark units and Drinfeld modules*, winner of the Harvard University Hoopes prize for outstanding senior thesis.

2007-08   **Luca Candelori**, *Modular curves and Mazur's theorem.*

2006-07   **Kaloyan Slavov**, *Gross–Stark units for totally real number fields*, winner of the Harvard University Hoopes prize for outstanding senior thesis.

2005-06   **Jennifer Balakrishnan**, *CM constructions for elliptic curves.*

Mentoring

2021–present   **Math Alliance**, *Mentor for undergraduate and graduate students from underrepresented backgrounds.*

2020–present   **Association for Women in Mathematics**, *Mentor for undergraduate women at Duke University.*

Undergraduate Research

2020 Summer   **DoMath**, *Led student group conducting research on representation theory with Jiuya Wang*, Will result in student journal publication, Students: Zizai Cui, Max Fleischer, Yijia Liu.

2020–2021 **Computations of Brumer–Stark Units**, *Led and funded students performing computations related to my research*, Students: Max Fleischer, Yijia Liu.

Results available at `https://github.com/liuyj8526/Computation-of-Elliptic-Units`

K–12 Outreach

2016–23 **Regeneron Science Talent Search**, *Judge*.

2015–16 **Intel Science Talent Search**, *Judge*.

Invited Conference Talks

June 2024 **Recent Progress on Hilbert's 12th Problem**, *ICMS*, Bayes Centre, Edinburgh, Scotland.

June 2024 **Regulators V**, *University of Pisa*, Pisa, Italy.

April 2024 **Current Developments in Mathematics**, *Harvard University*.

August 2023 **Conference on Global Langlands, Shimura Varieties, and Shtukas**, *Hausdorff Institute of Mathematics*, Bonn, Germany.

August 2023 **Number Theory and Combinatorics in Duluth**, *University of Minnesota, Duluth*.

May 2023 **Arithmetic Geometry and Algebraic Groups**, *University of Virginia*.

Oct 2022 **Québec–Maine Number Theory Conference**, *Laval University*, plenary lecture.

Sep 2022 **School on Arithmetic Geometry**, *University of Duisburg-Essen*, minicourse: "Ribet's Method".

Aug 2022 **Elliptic Curves and the special values of L-functions**, *International Centre for Theoretical Sciences, Bengaluru (online)*.

Jul 2022 **A Pair of Automorphic Workshops**, *University of Oregon (online)*, minicourse: "Ribet's Method".

Jul 2022 **International Congress of Mathematicians**, *Invited Speaker, Number Theory Section (online)*.

Apr 2022 **Kerala School of Mathematics**, *Recent Advances in Mathematics and Related Areas (online)*.

Jul 2021 **Workshop on Eisenstein Series and Equivariant Cohomology**, *University of Regensburg (online)*.

Jun 2021 **Summer School on Polynomial Methods**, *Hausdorff Research Institute for Mathematics (online)*, minicourse: "Introduction to Transcendence Theory".

Jun 2021 **Canadian Mathematical Society Meeting**, *Special Session on Arithmetic Geometry (online)*.

Jan 2020 **International Colloquium on Arithmetic Geometry**, *Tata Institute of Fundamental Research, Mumbai, India*.

Apr 2019 **Southeastern Regional Meeting on Numbers**, *UNC-Greensboro*.

Jul 2018 **Algebraische Zahlentheorie**, *Mathematisches Forschungsinstitut Oberwolfach, Germany*.

Jul 2017 **Iwasawa 2017**, *University of Tokyo, Japan*.

Mar 2017 **Southern California Number Theory Day**, *UC San Diego*.

Jun 2016	**New Directions in Iwasawa Theory**, *Banff International Research Station, Banff, AB, Canada.*
Jul 2015	**Iwasawa 2016**, *King's College, London, UK.*
Apr 2015	**Southern California Number Theory Day**, *California Institute of Technology.*
Feb 2015	**Regulators, Mahler Measures, and Special Values of L-functions**, *Centre de Recherches Mathématiques, Montreal.*
Jun 2014	**Conference on p-adic Variation in Number Theory**, *Boston University.*
Oct 2013	**Conference on Stark's Conjectures and related topics**, *UC San Diego.*
June 2013	**Periods of Automorphic Forms and Applications**, *Stanford University.*
Sep 2012	**Conference on Rational Points on Curves**, *Mathematical Institute, Oxford, England.*
Oct 2012	**Conference on L-functions and Arithmetic**, *Yonsei University, Seoul, Korea.*
Jun 2012	**Conference on p-adic Modular Forms and Arithmetic**, *UC Los Angeles.*
Apr 2012	**Workshop on the p-adic Langlands Program**, *Fields Institute, Toronto, Canada.*
Mar 2011	**Arizona Winter School**, *University of Arizona.*
Nov 2010	**Southern California Number Theory Day**, *University of California, Irvine.*
Jul 2010	**Canadian Number Theory Association**, *Acadia University, Wolfville, NS, Canada.*
Jun 2010	**Pacific Rim Conference on Mathematics, Number Theory Session**, *Stanford University.*
Jun 2010	**Conference on Modular/Geometric Iwasawa Theory and p-adic L-functions**, *UC Los Angeles.*
Jun 2010	**Conference on Number Theory and Representation Theory**, *Harvard University.*
Feb 2010	**Magma Conference on p-adic L-functions**, *Centre de Recherches Mathématiques, Montreal.*
Dec 2009	**Cycles and Special Values of L-functions**, *Centre de Recerca Matemàtica, Barcelona.*
Oct 2009	**Dedekind Sums in Geometry, Topology, and Arithmetic**, *Banff International Research Station, Banff, AB, Canada.*
Jul 2009	**Park City Mathematics Institute Summer School on the Arithmetic of L-functions**, *Park City, UT.*
Jul 2008	**Modular Forms and Arithmetic**, *Mathematical Sciences Research Institute, Berkeley, CA.*
Jun 2007	**Modular forms: Arithmetic and Computation**, *Banff International Research Station, Banff, AB, Canada.*
Jun 2006	**Canadian Number Theory Association IX**, *University of British Columbia, Vancouver, BC, Canada.*
Apr 2006	**American Mathematical Society Sectional Meeting**, *San Francisco, CA.*
Apr 2006	**American Mathematical Society Sectional Meeting**, *Durham, NH.*
Dec 2005	**Intersection of Arithmetic Cycles and Automorphic Forms**, *Centre de Recherches Mathématiques, Montreal.*
Nov 2005	**Gathering on Stark's Conjectures**, *Centre de Recherches Mathématiques, Montreal.*
Dec 2004	**Canadian Mathematical Society Winter Meeting, Arithmetic Geometry Session**, *Montreal.*

Aug 2004 **Number Theory Conference in Honor of Harold Stark**, *University of Minnesota, Minneapolis.*

Invited Seminar and Colloquium Talks

Nov 2023 **BC/MIT Number Theory Seminar**, *MIT.*

May 2023 **University of California San Diego**, *Colloquium and Number Theory Seminar.*

Mar 2023 **Temple University**, *Colloquium and Number Theory Seminar.*

Feb 2023 **Stanford University**, *Number Theory Seminar.*

Nov 2022 **University of North Carolina–Greensboro**, *Colloquium.*

Nov 2022 **Emory University**, *Athens–Atlanta Number Theory Seminar.*

Apr 2022 **University of Virginia**, *Number Theory Seminar (online).*

Feb 2022 **McMaster University**, *Britton Distinguished Lecture Series.*

Feb 2022 **ICTS Bangalore**, *Distinguished Lecture Series of the Mathematics Consortium of India (online).*

Dec 2021 **McGill University/Centre de Recherches Mathématiques**, *Colloquium and Number Theory Seminar.*

Jun 2021 **École Normale Supérieure de Lyon**, *Number Theory Seminar (online).*

Feb 2021 **University of Michigan and Michigan State University**, *Colloquium (online).*

Nov 2020 **University of Duisburg–Essen**, *Essener Seminar für Algebraische Geometrie und Arithmetik (online).*

Oct 2020 **Berkeley–Caltech–Stanford**, *Number Theory Seminar (online).*

Sep 2020 **Rutgers-Newark**, *Colloquium (online).*

Aug 2020 **Fields Institute, Toronto**, *Number Theory Seminar (online).*

Jun 2020 **Universitat Politècnica de Catalunya**, *Number Theory Seminar (online).*

Nov 2019 **University of Pennsylvania**, *Number Theory Seminar.*

Oct 2019 **Rutgers University**, *Colloquium.*

Mar 2019 **Harvard University**, *Number Theory Seminar.*

Nov 2018 **Columbia University**, *Colloquium and Number Theory Seminar.*

Oct 2018 **Princeton University and Institute for Advanced Study**, *Number Theory Seminar.*

Sep 2018 **Stanford University**, *Number Theory Seminar.*

Jul 2018 **Universität Regensburg**, *Number Theory Seminar.*

Jul 2018 **University of California, Berkeley**, *Colloquium.*

Jan 2018 **Duke University**, *Number Theory Seminar.*

Dec 2017 **Stanford University**, *Number Theory Seminar.*

Dec 2017 **UC Berkeley**, *Number Theory Seminar.*

Sep 2017 **Université de Paris 7, Diderot**, *Séminaire de Théorie des Nombres.*

Jun 2017 **King's College, London, UK**, *Number Theory Seminar.*

May 2017 **California Institute of Technology**, *Number Theory Seminar.*

Apr 2017 **University of Texas, Austin**, *Colloquium.*

Dec 2016   **MIT**, *Number Theory Seminar.*
Nov 2016   **McGill University**, *Quebec–Vermont Number Theory Seminar.*
May 2016   **UC Los Angeles**, *Number Theory Seminar.*
Mar 2016   **King's College, London, UK**, *Number Theory Seminar.*
Nov 2015   **University of Chicago**, *Number Theory Seminar.*
Nov 2015   **Northwestern University**, *Number Theory Seminar.*
Sep 2015   **Université de Paris 6, Jussieu**, *Séminaire de Théorie des Nombres.*
May 2014   **UC Los Angeles**, *Number Theory Seminar.*
Sep 2013   **Stanford University**, *Number Theory Seminar.*
Oct 2012   **Stanford University**, *Number Theory Seminar.*
May 2012   **University of Wisconsin**, *Number Theory Seminar.*
Mar 2012   **Harvard University**, *Number Theory Seminar.*
Mar 2012   **BC/MIT Number Theory Seminar**, *Boston College.*
Feb 2012   **UC Los Angeles**, *Colloquium and Number Theory Seminar.*
Nov 2011   **California Institute of Technology**, *Number Theory Seminar.*
Oct 2011   **Stanford University**, *Number Theory Seminar.*
Sep 2011   **Columbia University**, *Number Theory Seminar.*
Sep 2011   **Rutgers University**, *Colloquium.*
Apr 2011   **Northwestern University**, *Number Theory Seminar.*
Dec 2010   **University of Wisconsin**, *Number Theory Seminar.*
Oct 2010   **Princeton University and Institute for Advanced Study**, *Number Theory Seminar.*
Sep 2010   **University of Texas, Austin**, *Number Theory Seminar.*
Sep 2009   **Stanford University**, *Colloquium.*
Aug 2009   **University of Maryland, College Park**, *Number Theory Seminar.*
Feb 2009   **Stanford University**, *Number Theory Seminar.*
Feb 2009   **California Institute of Technology**, *Number Theory Seminar.*
Feb 2009   **University of California, Davis**, *Algebra and Discrete Mathematics Seminar.*
Jan 2009   **University of California, Berkeley**, *Number Theory Seminar.*
Jan 2008   **University of California, Berkeley**, *Number Theory Seminar.*
Jun 2008   **Université de Paris 7, Chevaleret**, *Séminaire de Théorie des Nombres.*
Jan 2008   **University of Texas, Austin**, *Number Theory Seminar.*
Jan 2008   **University of California, Berkeley**, *Colloquium and Number Theory Seminar.*
Jan 2008   **University of Michigan**, *Colloquium and Number Theory Seminar.*
Oct 2007   **Rutgers University, Newark**, *Colloquium.*
Apr 2007   **University of Wisconsin**, *Number Theory Seminar.*
Mar 2007   **University of Arizona**, *Colloquium and Number Theory Seminar.*
Mar 2006   **University of California, San Diego**, *Colloquium and Number Theory Seminar.*
Apr 2007   **University of Illinois, Chicago**, *Number Theory Seminar.*
Apr 2006   **Harvard University**, *Number Theory Seminar.*

Apr 2006	**Brandeis University**, *Fellowship of the Ring Seminar*.
Mar 2006	**Stanford University**, *Number Theory Seminar*.
Nov 2005	**McMaster University**, *Arithmetic Geometry Seminar*.
Dec 2004	**Harvard University**, *Number Theory Seminar*.
Nov 2004	**Brown University**, *Algebra and Number Theory Seminar*.
Oct 2004	**Boston University**, *Algebra Seminar*.
Mar 2004	**Amherst College**, *Five College Number Theory Seminar*.
Mar 2004	**Stanford University**, *Number Theory Seminar*.
Feb 2004	**University of California, Berkeley**, *Number Theory Seminar*.
Feb 2004	**University of California, Los Angeles**, *Number Theory Seminar*.
Jan 2004	**Harvard University**, *Number Theory Seminar*.
Dec 2003	**University of Michigan**, *Number Theory Seminar*.
Nov 2003	**Princeton University and Institute for Advanced Study**, *Number Theory Seminar*.
Mar 2003	**McGill University**, *Quebec–Vermont Number Theory Seminar*.