

## CURRICULUM VITAE

**Name** Peter Louis Clark (professionally: Pete L. Clark)

**Date and Place of Birth** June 28, 1976; Philadelphia, Pennsylvania

### Professional Preparation

1998–2003     HARVARD UNIVERSITY, Mathematics PhD 2003

1994–1998     UNIVERSITY OF CHICAGO, Mathematics BA, MS 1998

### Appointments

2023–           PROFESSOR AND UNDERGRADUATE HONORS ADVISOR, University of Georgia

2019–2023     PROFESSOR, University of Georgia

2016–2019     PROFESSOR AND GRADUATE COORDINATOR, University of Georgia

2011–2016     ASSOCIATE PROFESSOR, University of Georgia

2009           VISITING SCHOLAR, Université de Bordeaux I

2006–2011     ASSISTANT PROFESSOR, University of Georgia

2006           POSTDOCTORAL FELLOW, Mathematical Sciences Research Institute

2003–2005     POSTDOCTORAL FELLOW, McGill University

2003           VISITING SCHOLAR, University of Pennsylvania.

### Publications

[1] P.L. Clark, *Period-index problems in WC-groups I: elliptic curves*, J. Number Theory 114 (2005), 193–208.

[2] G. Alon and P.L. Clark, *On the number of representations of an integer by a linear form*, Journal of Integer Sequences, Vol. 8 (2005), Article 05.5.2

[3] P.L. Clark, *On elementary equivalence, isomorphism and isogeny*. J. Théor. Nombres Bordeaux 18 (2006), 29–58.

[4] P.L. Clark, *There are genus one curves of every index over every number field*, J. Reine Angew. Math. 594 (2006), 201–206.

[5] P.L. Clark, *Galois groups via Atkin-Lehner twists*, Proc. Amer. Math. Soc. 135 (2007), 617–624.

[6] P.L. Clark, *Abelian points on algebraic varieties*, Math. Research Letters 14 (2007), 731–743.

[7] P.L. Clark, *On the indices of curves over local fields*, Manuscripta Math. 124 (2007), 411–426.

- [8] P.L. Clark and X. Xarles, *Local bounds for torsion points on abelian varieties*, Canad. J. Math. 60 (2008), 532–555.
- [9] P.L. Clark, *An ‘Anti-Hasse Principle’ for prime twists*, Int. J. of Number Theory 4 (2008), 627–637.
- [10] P.L. Clark, *On the Hasse Principle for Shimura curves*, Israel J. Math. 171 (2009), 349–365.
- [11] P.L. Clark, *Elliptic Dedekind domains revisited*, Enseign. Math. (2) 55 (2009), 213–225.
- [12] P.L. Clark and S. Sharif, *Period, index and potential Sha*, Algebra and Number Theory 4 (2010), 151–174.
- [13] P.L. Clark, *The period-index problem in WC-groups IV: a local transition theorem*, J. Théor. Nombres Bordeaux 18 (2010), 583–606.
- [14] P.L. Clark, *Covering numbers in linear algebra*, Amer. Math. Monthly 119 (2012), 65–67.
- [15] P.L. Clark, *Euclidean quadratic forms and ADC-forms I*, Acta Arithmetica 154 (2012), 137–159.
- [16] P.L. Clark, J. Hicks, K. Thompson and N. Walters, *GoNII: Universal quaternary quadratic forms*, Integers 12 (2012), A50, 16pp.
- [17] P.L. Clark, B. Cook and J. Stankewicz, *Torsion points on elliptic curves with complex multiplication (with an appendix by Alex Rice)*, Int. J. of Number Theory 9 (2013), 447–479.
- [18] P.L. Clark, J. Hicks, H. Parshall and K. Thompson *GoNI: Primes represented by binary quadratic forms*. Integers 13 (2013), A37, 18pp.
- [19] P.L. Clark, *Graph Derangements*, Open Journal of Discrete Mathematics 3 (2013), 183–191.
- [20] P.L. Clark and N. Diepeveen, *Absolute convergence versus convergence in ordered fields*. Amer. Math. Monthly 121 (2014), 909–916.
- [21] P.L. Clark and W.C. Jagy, *Euclidean quadratic forms and ADC forms II: integral forms*, Acta Arithmetica 164 (2014), 265–308.
- [22] P.L. Clark, P. Corn, A. Rice and J. Stankewicz, *Computation on elliptic curves with complex multiplication*. LMS Journal of Computation and Mathematics 17 (2014), 509–535.
- [23] P.L. Clark, *The Combinatorial Nullstellensätze revisited*, Electronic Journal of Combinatorics. Volume 21, Issue 4 (2014). Paper #P4.15
- [24] A. Brunyate and P.L. Clark, *Extending the Zolotarev-Frobenius approach to quadratic reciprocity*, Ramanujan J. 37 (2015), 25–50.
- [25] P.L. Clark, *A note on Euclidean order types*, Order 32 (2015), 157–178.
- [26] P.L. Clark, A. Forrow and J.R. Schmitt, *Warning’s second theorem with restricted variables*. Combinatorica 37 (2017), 397–417.

- [27] P.L. Clark and P. Pollack, *The truth about torsion in the CM case*, C.R. Math. Acad. Sci. Paris 353 (2015), 683–688.
- [28] P.L. Clark and A. Lacy, *There are genus one curves of every index over every infinite, finitely generated field*, to appear in J. Reine Angew. Math.
- [29] A. Bourdon, P.L. Clark and J. Stankewicz, *Torsion points on CM elliptic curves over real number fields*. Trans. Amer. Math. Soc. 369 (2017), 8457–8496.
- [30] P.L. Clark, *The Euclidean criterion for irreducibles*. Amer. Math. Monthly 124 (2017), 198–216.
- [31] A. Bourdon, P.L. Clark and P. Pollack, *Anatomy of torsion in the CM case*. Math. Z. 285 (2017), 795–820.
- [32] P.L. Clark, *The cardinal Krull dimension of a ring of holomorphic functions*. Expo. Math. 35 (2017), 350–356.
- [33] P.L. Clark and J. Voight, *Algebraic curves uniformized by congruence subgroups of triangle groups* Algebraic curves uniformized by congruence subgroups of triangle groups. Trans. Amer. Math. Soc. 371 (2019), 33–82.
- [34] A. Bishnoi, P.L. Clark, A. Potukuchi and J.R. Schmitt, *On zeros of a polynomial in a finite grid*. Combin. Probab. Comput. 27 (2018), no. 3, 310–333.
- [35] P.L. Clark, S. Gosavi and P. Pollack, *The number of atoms in a primefree atomic domain*. Comm. Algebra 45 (2017), 5431–5442.
- [36] P.L. Clark and P. Pollack, *The truth about torsion in the CM case, II*. Q. J. Math. 68 (2017), 1313–1333.
- [37] P.L. Clark, *A note on rings of finite rank*. Comm. Algebra 46 (2018), 4223–4232.
- [38] P.L. Clark and P. Pollack, *Pursuing polynomial bounds on torsion*. Israel J. Math. 227 (2018), 889–909.
- [39] P.L. Clark and L.D. Watson, *Varga’s theorem in number fields* INTEGERS 18 (2018), A74, 11 pp.
- [40] P.L. Clark and J. Stankewicz, *Hasse Principle violations for Atkin-Lehner twists of Shimura curves*. Proc. Amer. Math. Soc. 146 (2018), 2839–2851.
- [41] P.L. Clark, M. Milosevic and P. Pollack, *Typically bounding torsion*. J. Number Theory 192 (2018), 150–167.
- [42] P.L. Clark and L.D. Watson, *ABC and the Hasse principle for quadratic twists of hyperelliptic curves*. C. R. Math. Acad. Sci. Paris 356 (2018), 911–915.
- [43] P.L. Clark, *Warning’s Second Theorem with relaxed outputs*. (Previous title: “Fattening up Warning’s Second Theorem.”) J. Algebraic Combin. 48 (2018), 325–349.
- [44] P.L. Clark, N. Lebowitz-Lockard and P. Pollack, *A Note on Golomb topologies*. Quaest. Math. 42 (2019), 73–86.
- [45] I.N. Baoulina, A. Bishnoi and P.L. Clark, *A generalization of the Chevalley-Warning theorem*. Proc. Amer. Math. Soc. 146 (2018), 2839–2851.

- [46] P.L. Clark, *Rabinowitsch times six*. Rocky Mountain J. Math. 49 (2019), 433–485.
- [47] P.L. Clark, *The Instructor’s Guide to Real Induction*. Math. Mag. 92 (2019), 136–150.
- [48] P.L. Clark and P. Pollack, *Reciprocity by resultant in  $k[t]$* . Enseign. Math. 65 (2019), 101–116.
- [49] A. Bourdon and P.L. Clark, *Torsion points and Galois representations on CM elliptic curves*. Pacific J. Math. 305 (2020), 43–88.
- [50] A. Bourdon and P.L. Clark, *Torsion points and isogenies on CM elliptic curves*. J. Lond. Math. Soc. (2) 102 (2020), 580–622.
- [51] M. Chou, P.L. Clark and M. Milosevic, *Acyclotomy of torsion in the CM case*. Ramanujan J. 55 (2021), 1015–1037.
- [52] P.L. Clark, T. Genao and F. Saia, *Chevalley-Warning at the boundary*. Expo. Math. 39 (2021), 604–623.
- [53] P.L. Clark, T. Genao, P. Pollack and F. Saia, *The least degree of a CM point on a modular curve*. J. Lond. Math. Soc. (2) 105 (2022), no. 2, 825–883.
- [54] P.L. Clark and U. Schauz, *Functional degrees and arithmetic applications, I: the set of functional degrees*. J. Algebra 608 (2022), 691–718.
- [55] P.L. Clark, P. Pollack, J. Rouse and K. Thompson, *Densities of integer sets represented by quadratic forms*. J. Number Theory 256 (2024), 290–328.
- [56] P.L. Clark and N. Triantafillou, *Ax’s lemma in the Aichinger-Moosbauer calculus*. J. Algebra 659 (2024), 542–580.

#### Submitted for Publication

- [57] P.L. Clark, *Period-index problems in WC-groups II: abelian varieties*. <http://alpha.math.uga.edu/~pete/wc2.pdf>
- [58] P.L. Clark, *Curves over global fields violating the Hasse Principle*. <http://alpha.math.uga.edu/~pete/HasseBjornODD.pdf>
- [59] P.L. Clark, *Abstract geometry of numbers: linear forms*. [http://alpha.math.uga.edu/~pete/GoN\\_Linear\\_Forms.pdf](http://alpha.math.uga.edu/~pete/GoN_Linear_Forms.pdf)
- [60] P.L. Clark, *Solution to the inverse Mordell-Weil problem for elliptic curves*. <http://alpha.math.uga.edu/~pete/inversemw.pdf>
- [61] P.L. Clark, *A note on base size sets*. [http://alpha.math.uga.edu/~pete/base\\_size\\_brief.pdf](http://alpha.math.uga.edu/~pete/base_size_brief.pdf)
- [62] A. Bishnoi and P.L. Clark, *Restricted variable Chevalley-Warning theorems*. <http://alpha.math.uga.edu/~pete/Bishnoi-Clark22.pdf>
- [63] P.L. Clark, *CM elliptic curves: volcanoes, reality and applications, Part I*. [http://alpha.math.uga.edu/~pete/Isogenies\\_Part\\_I\\_arxiv.pdf](http://alpha.math.uga.edu/~pete/Isogenies_Part_I_arxiv.pdf)
- [64] P.L. Clark and F. Saia, *CM elliptic curves: volcanoes, reality and applications, Part II*. [http://alpha.math.uga.edu/~pete/Part\\_II\\_December\\_30\\_2022.pdf](http://alpha.math.uga.edu/~pete/Part_II_December_30_2022.pdf)

[65] P.L. Clark, *A Mean Value Inequality for all functions*.  
[http://alpha.math.uga.edu/~pete/MVT\\_Dini.pdf](http://alpha.math.uga.edu/~pete/MVT_Dini.pdf)

[66] P.L. Clark and U. Schauz, *Functional degrees and arithmetic applications II: the group-theoretic prime Ax-Katz theorem*.  
[http://alpha.math.uga.edu/~pete/Clark-Schauz\\_Part2.pdf](http://alpha.math.uga.edu/~pete/Clark-Schauz_Part2.pdf)

[67] P.L. Clark and U. Schauz, *Functional degrees and arithmetic applications III: beyond prime exponent*.

[68] P.L. Clark, *On the stratification conjecture for CM torsion subgroups*. <http://alpha.math.uga.edu/~pete/2-01sonv2.pdf>

### In Preparation

[69] P.L. Clark and J. Hicks, *Abstract geometry of numbers: Hermite constants*.

[70] F. Breuer, P.L. Clark, P. Pollack and A. Rabenantoandro, *The truth about torsion in the CM case III: Drinfeld modules*.

[71] P.L. Clark, *Gorenstein endomorphism rings of abelian varieties*.

[72] P.L. Clark, *The restricted variable Kakeya problem*.

### Submitted Research Monograph

[R1] P.L. Clark, *Around the Chevalley-Waring Theorem*. 445 pages.

### Books In Preparation

[B1] P.L. Clark, *Number Theory: A Contemporary Introduction*. Current draft: 282 pages. <http://alpha.math.uga.edu/~pete/4400FULL.pdf>

[B2] P.L. Clark, *Honors Calculus*. Current draft: 356 pages. <http://alpha.math.uga.edu/~pete/2400full.pdf>

[B3] P.L. Clark, *Commutative Algebra*. Current draft: 461 pages. <http://alpha.math.uga.edu/~pete/integral2015.pdf>

[B4] P.L. Clark, *General Topology*. Current draft: 291 pages. <http://alpha.math.uga.edu/~pete/pointset.pdf>

[B5] P.L. Clark, *Field Theory*. Current draft: 167 pages. <http://alpha.math.uga.edu/~pete/FieldTheory.pdf>

[B6] P.L. Clark, *Algebraic Curves: an Algebraic Approach*. Current draft: 141 pages. [http://alpha.math.uga.edu/~pete/8320\\_2020.pdf](http://alpha.math.uga.edu/~pete/8320_2020.pdf)

[B7] P.L. Clark, *Introduction to Advanced Mathematics*. Current draft: 314 pages. [http://alpha.math.uga.edu/~pete/3200\\_supplemental.pdf](http://alpha.math.uga.edu/~pete/3200_supplemental.pdf)

[B8] P.L. Clark, *Algebraic Number Theory*. Current draft: Part I: 164 pages. <http://alpha.math.uga.edu/~pete/ANT24.pdf> Part II: 157 pages. <http://alpha.math.uga.edu/~pete/8410FULL.pdf>.

### Grant Support

(1) Principal Investigator, NSF Research Grant DMS-0701771, 2007-2013.

- (2) UGA Provost Summer Research Grant, 2013.
- (3) Co-Principal Investigator, NSF “AGANT” Research Training Grant DMS-1344994, 2014–2018.
- (4) Simons Grant, 2016–2023.

### Administration

- (1) 2014-2015 Academic Year Coordinator, AGANT RTG.
- (2) 2015 Summer Coordinator, AGANT RTG.
- (3) UGA Mathematics Department Graduate Coordinator, 2016–2019.
- (4) Undergraduate Honors Advisor, 2023–

### Teaching

- |           |  |
|-----------|--|
| 2006–     | <p><b>Tenure track / tenured professor</b>, University of Georgia</p> <p>Analytic Geometry and Calculus (Math 2200), Fall 2006, Fall 2009.</p> <p>Calculus II (Math 2260), Fall 2007, Fall 2013, Spring 2014, Fall 2014.</p> <p>Honors Calculus With Theory I (Math 2400), Fall 2011.</p> <p>Honors Calculus With Theory II (Math 2410), Spring 2012.</p> <p>Linear Algebra (Math 3000), Fall 2013.</p> <p>Sequences and Series (Math 3100), Spring 2011, Fall 2016, Spring 2022.</p> <p>Intro. to Higher Math (Math 3200), Spring 2009, Fall 2009, Spring 2016, Fall 2021, Fall 2023.</p> <p>Real Analysis (Math 4100/6100), Fall 2022, Fall 2023.</p> <p>Complex Analysis (Math 4150/6150), Fall 2017.</p> <p>General Topology (Math 4200/6200), Spring 2015, Fall 2020.</p> <p>Number Theory (Math 4400/6400), Spring 2007, Spring 2009, Spring 2018.</p> <p>Foundations of Graduate Mathematics (Math 7900), Fall 2018, Fall 2019.</p> <p>Commutative Algebra (Math 8020), Spring 2011, Spring 2016, Spring 2020.</p> <p>Homological Algebra (Math 8030), Spring 2013.</p> <p>Geometry of Schemes (Math 8310), Spring 2017.</p> <p>Algebraic Curves (Math 8320), Fall 2008, Fall 2020.</p> <p>Algebraic Number Theory I (Math 8400), Spring 2014, Fall 2022, Fall 2024.</p> <p>Algebraic Number Theory II (Math 8410), Spring 2010, Spring 2019.</p> <p>Complex Multiplication (Math 8410), Spring 2015.</p> <p>Primes of the Form <math>X^2 + nY^2</math> (Math 8430), Spring 2008.</p> <p>Modular Curves [jointly with R. Varley] (Math 8430), Spring 2012.</p> <p>Zeta- and L-Functions [jointly with R. Varley] (Math 8430), Fall 2015.</p> <p>Elliptic Curves (Math 8430), Fall 2012.</p> <p>Topics in the Arithmetic of Abelian Varieties (Math 8430), Spring 2020.</p> <p>Galois Cohomology and Class Field Theory (Math 8430), Spring 2021.</p> <p>Around the Chevalley-Waring Theorem (Math 8430), Spring 2025.</p> <p>Model Theory (Math 8900), Summer 2010.</p> <p>Noncommutative Algebra (Math 8900), Summer 2011.</p> |
| 2003–2005 | <p><b>Instructor</b>, McGill University</p> <p>Introduction to Shimura Varieties (Math 726), Fall 2005.</p> <p>Real Analysis II (Math 243), Winter 2005.</p> <p>Calculus I (Math 139), Winter 2005.</p> <p>Linear Algebra (Math 133), Fall 2004.</p>   |

2004                    **Instructor**, Concordia University  
 Advanced Calculus (Engineering Math 233), Winter 2004.

### **Synergistic Activities**

(1) Joint leader (with Paul Pollack) of a 2015–2016 vertical research group on the process of mathematical research. Participants: Kubra Benli, Jordan Clark, Saurabh Gosavi, Noah Lebowitz-Lockard, Robert Samalis, Lee Troupe, Lori Watson (graduate students).

(2) Leader of a 2011–2012 VIGRE research group on Geometry of Numbers and applications to number theory. Participants: Chris Drupieski (postdoc), Brian Bonsignore, Harrison Chapman, Jacob Hicks, Lauren Huckaba, David Krumm, Allan Lacy, Nham Ngo, Hans Parshall, Alex Rice, Jim Stankewicz, Kate Thompson, Lee Troupe, Nathan Walters and Jun Zhang (graduate students).

(3) Leader of a 2007–2008 VIGRE research group on torsion points on CM elliptic curves. Participants: Patrick K. Corn (postdoc), Steve Lane, Jim Stankewicz, Nathan Walters, Steve Winburn, Ben Wyser (graduate students), Alex Rice (undergraduate).

(4) Leader of a 2009 working seminar on a paper of Mazur and Rubin, *Ranks of twists of elliptic curves and Hilbert's 10th problem*.

(5) Leader of a 2005 summer research project for undergraduates at McGill University, funded by the Institut Scientifique des Mathématiques (ISM).  
 Topic: “Almost sure limit sets of vector-valued Rademacher series.”

### **Students**

- (1) Laura Nunley, MS. UGA, 2010.
- (2) James Henry Stankewicz, PhD. UGA, 2012.
- (3) Allan Gerardo Lacy, PhD. UGA, 2015.
- (4) Jacob Hicks, PhD. UGA, 2016.
- (5) Marko Milosevic, PhD. UGA, 2018.
- (6) Lori D. Watson, PhD. UGA, 2019.
- (7) Tyler Genao, PhD. UGA, 2023.
- (8) Frederick Saia, PhD. UGA, 2023.
- (9) Ilkiz Bildik, PhD. UGA, 2024.
- (10) Christopher Padilla Sandoval, PhD student, UGA.
- (11) Sara Logsdon, Masters student, UGA.

### Other Service

- (1) UGA Math Department Curriculum Committee: 2023–
- (2) University Level Tenure and Promotion Committee: 2020–2022.
- (3) UGA Math Department Executive Committee: 2019–2022.
- (4) UGA Math Department Head Review Committee: 2018.
- (5) UGA Math Department Personnel Committee: 2013–2016. Chair: 2014–2016.
- (6) UGA Math Department Graduate Committee (includes admissions): 2009–2013, 2016–2020. (chair 2016–2019 *ex officio*).
- (7) UGA Math Department Colloquium Committee: 2008–2010.
- (8) UGA Qualifying Exam Committees: Algebra, Complex Analysis, Topology.
- (9) On the Oral Exam/Thesis Committee for: Steve Winburn, Nathan Walters, Jim Stankewicz, Lev Konstantinovsky, Matt Mastin, David Krumm, Kate Thompson, John Doyle, Joe Tenini, Adrian Brunyate, Jacob Hicks, Allan Lacy, Hans Parshall, Ken Jacobs, Lee Troupe, Patrick McFaddin, Abraham Varghese, Marko Milosevic, Lori Watson, Ernest Guico, Saurabh Gosavi, Riley Ellis, Mentzelos Melistas, Arvind Suresh, Makoto Suwama, Ben Tighe, Tyler Genao, Frederick Saia, Haiyang Wang, Ilkiz Bildik, Peter Cassels.
- (9) Co-organizer (with Daniel Krashen, Patrick McFaddin and Katherine Thompson), Workshop and Symposium on Quadratic Forms, UGA, July 2017.
- (10) Co-organizer (with Abbey Bourdon), special session on the arithmetic of elliptic curves, AMS Sectional Meeting, Athens, GA, March 2016.
- (11) Co-organizer (with Dino Lorenzini), special session on arithmetic geometry, AMS Sectional Meeting, Boca Raton, FL, October/November 2009.



### Selected Talks

- Colloquium, Indiana University Indianapolis, Indianapolis, IN 11/24  
Title: “The restricted variable Kakeya problem.”
- Vistas in Number Theory Conference, College Park, MD 6/24  
Title: “Group-theoretic Ax-Katz Theorems.”
- 2024 Langenhop Lecture and SIU Conference, Carbondale, IL 5/24  
Title: “Densities of sets represented by integral quadratic forms”
- Colloquium, West Chester University. West Chester, PA 3/24  
Title: “A group-theoretic Ax-Katz Theorem”
- Colloquium, Claremont Colleges. Claremont, CA 2/24  
Title: “A group-theoretic Ax-Katz Theorem”
- Modular Curves and Galois Representations Conference in Zagreb, Croatia 9/23.  
Title: “Report on the CM case: torsion points, Galois representations and modular curves”
- Dartmouth College Colloquium 6/23  
Title: “Group-Theoretic Ax-Katz Theorems.”
- VaNTAGe seminar, 6/21  
Title: “The torsion subgroup of a CM elliptic curve over a number field.”
- Connecticut Number Theory Conference, opening speaker 6/20  
Title: “CM Points on Modular Curves: Volcanoes and Reality”
- AMS Sectional Meeting in Riverside, CA 11/19  
Title: “The truth about torsion in the CM case”
- AMS Sectional Meeting in Honolulu, HI 3/19  
Title: “Asymptotics of torsion on elliptic curves over number fields”
- Algebra Seminar, University of Pennsylvania, 9/18  
Title: “Reciprocity by resultant in  $k[t]$ .”
- Number Theory seminar, University of South Carolina, 4/18  
Title: “Densities of sets of integers represented by quadratic forms.”
- AGeNTS seminar, Tufts, 3/18  
Title: “Densities of sets of integers represented by quadratic forms.”
- Number Theory Seminar, MIT, 11/16  
Title: “Torsion points and Galois representations on elliptic curves.”
- Algebra Seminar, Clemson, 4/16  
Title: “The number of atoms in an atomic domain.”
- Colloquium, Middlebury College, VT, 11/15.  
Title: “A new proof of the generalized Wilson’s theorem.”
- AMS Sectional Meeting in Huntsville, AL, 3/15, Special Session on Quadratic Forms in Arithmetic and Geometry  
Title: “Quadratic forms and the Geometry of Numbers”
- Colloquium, Dartmouth College, 10/14.  
Title: “From number theory to combinatorics via polynomial functions.”
- Number Theory Seminar, Dartmouth College, 10/14.  
Title: “Torsion points on CM elliptic curves over real number fields.”

- Discrete Mathematics Days of the Northeast, 9/14.  
Title: “Around the Chevalley-Waring Theorem.”
- Joint Meetings of the AMS and MAA, 1/13, Special Session on Arithmetic Theory of Quadratic Forms and Lattices.  
Title: “Euclidean ideals and quadratic forms.”
- Algebra Seminar, University of Georgia, 8/12.  
Title: “Classical invariant theory and the (regular) inverse Galois problem.”
- Number Theory Seminar, University of Georgia, 8/12.  
Title: “Geometry of Numbers Debriefing: Part I.”
- Number Theory Seminar, University of Texas, 4/12.  
Title: “Arithmetic on a family of non-arithmetic curves.”
- Number Theory Seminar, University of Georgia, 1/12.  
Title: “Quadratic reciprocity in abstract number rings.”
- Joint Meetings of the AMS and MAA, 1/12, Special Session on Rational Points on Algebraic Varieties.  
Title: “Euclidean quadratic forms and ADC-forms.”
- Algebra Seminar, Wesleyan University, 10/11  
Title: “Euclidean quadratic forms and ADC-forms.”
- Mathematics Colloquium, Wesleyan University, 10/11  
Title: “Overview of the local-global principle in number theory.”
- Number Theory Seminar, MIT, 3/10.  
Title: “The period-index problem for torsors under abelian varieties.”
- Number Theory Seminar, University of Georgia, 9/09.  
Title: “Algebraic curves uniformized by congruence subgroups of hyperbolic triangle groups.”
- Arithmetic Geometry Seminar, Université de Bordeaux I, 6/09.  
Title: “Algebraic curves violating the Hasse principle.”
- Number Theory Seminar, University of Georgia, 2/09.  
Title: “Biconic Curves, Part I.”
- Number Theory Seminar, University of Georgia, 11/08.  
Title: “Probabilistic ideas and methods in analytic number theory.”
- Number Theory Seminar, University of Georgia, 9/08.  
Title: “Quadratic twists, modular curves and the inverse Galois problem.”
- VIGRE Graduate Seminar, University of Georgia, 9/08.  
Title: “Things to do with a conditionally convergent series.”
- Number Theory Seminar, University of Georgia, 12/07.  
Title: “Torsion points on elliptic curves.”
- Number Theory Seminar, University of Illinois at Chicago, 11/07.  
Title: “On curves without rational points.”
- Number Theory Seminar, University of Georgia, 10/07.  
Title: “Existence of abelian varieties with prescribed endomorphism algebras.”
- Algebraic Geometry Seminar, University of Georgia, 10/07.  
Title: “Endomorphism algebras of abelian varieties.”
- Number Theory Seminar, University of Georgia, 3/07.  
Title: “Ramanujan graphs.”

- VIGRE Research Group on Hodge Theory, University of Georgia, 11/06.  
Title: “Mumford-Tate groups of abelian varieties.”
- Number Theory Seminar, University of Georgia, 8/06-9/06.  
Title: “Selections from the arithmetic geometry of modular curves and Shimura curves.”
- Algebra Seminar, University of Pennsylvania, 7/06.  
Title: “Rational points on Atkin-Lehner twists of modular curves.”
- Seminar Talk, MSRI, 4/06.  
Title: “Period-index problems in Galois cohomology and geometry.”
- Colloquium, Arizona State University, 2/06.  
Title: “Acquisition of rational points on algebraic curves.”
- Colloquium, U.C. Santa Cruz, 2/06.  
Title: “Acquisition of rational points on algebraic curves.”
- Number Theory Sminar, U.C. Berkeley, 2/06.  
Title: “Acquisition of rational points on algebraic curves.”
- Number Theory Seminar, University of Georgia, 1/06.  
Title: “The period-index problem in WC-groups.”
- Colloquium, University of Georgia, 1/06.  
Title: “Acquisition of rational points on algebraic curves.”
- Québec-Vermont Number Theory Seminar, 4/05.  
Title: “Arithmetic of algebraic curves with Galois Belyi maps.”
- Canadian Mathematical Society Winter Meeting, 12/04.  
Title: “One a question of Lang and Tate.”
- Number Theory Seminar, McMaster University, 1/04.  
Title: “The period-index problem in Weil-Châtelet groups.”
- Québec-Vermont Number Theory Seminar, 1/04.  
Title: “Period, index and potential Sha.”
- Galois Seminar, University of Pennsylvania, 7/03.  
Title: “Period-index problems in WC-groups.”
- Number Theory Workshop, Brown University, 5/03.  
Title: “Rational points on Atkin-Lehner quotients of Shimura curves.”
- Number Theory Seminar, Harvard University, 5/03.  
Title: “Rational points on Atkin-Lehner quotients of Shimura curves.”
- Galois Actions on Fundamental Groups Seminar, Harvard, 4/02.  
Title: “Fundamental groups in characteristic  $p$ .”

### **Address**

Department of Mathematics, University of Georgia, Athens, Georgia, 30602-7403.