

LEE TROUPE

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Department of Mathematics and Computer Science \diamond University of Lethbridge
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POSITIONS HELD

- | | |
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| University of Lethbridge
PIMS Postdoctoral Fellow | August 2018 - |
| University of British Columbia
Postdoctoral Fellow | August 2016 - July 2018 |

EDUCATION

- | | |
|--|------------------------|
| University of Georgia
Ph.D., Mathematics
Thesis: <i>Three applications of sieve methods in analytic number theory</i> | August 2010 - May 2016 |
| University of Tennessee
Bachelor of Science, Mathematics | August 2006 - May 2010 |

PAPERS

1. **The distribution of sums and products of additive functions** (with G. Martin)
submitted. 23 pages.
2. **The distribution of the number of subgroups of the multiplicative group**
(with G. Martin) 2018
J. Australian Math. Soc., to appear. 53 pages.
3. **Two problems concerning irreducible elements in rings of integers of number fields** (with P. Pollack) 2017
Bull. Aust. Math. Soc. **96**, pp. 44-58
4. **Orders of reductions of elliptic curves with many and few prime factors** 2017
Int. J. Number Theory **13**, pp. 2115-2134
5. **Bounded gaps between prime polynomials with a given primitive root** 2016
Finite Fields Appl. **37**, pp. 295-310
6. **On the number of prime factors of values of the sum-of-proper-divisors function** 2015
J. Number Theory **150C**, pp. 120-135

WORKS IN PROGRESS

1. **The eighth moment of the Riemann zeta function and additive divisor sums**
(with H. Kadiri, N. Ng, and P-J. Wong)
2. **Divisor sums representable as the sum of two squares**
3. **The distribution of repeated prime factors of $\varphi(n)$**

PRESENTATIONS

Distributions of polynomials of additive functions 2018 CMS Winter Meeting, Vancouver, BC	December 2018
Distributions of polynomials of additive functions INTEGERS 2018, Augusta University	October 2018
Distributions of polynomials of additive functions Canadian Number Theory Association XV, Université Laval	July 2018
Counting subgroups of the multiplicative group West Coast Number Theory, Pacific Grove, CA	December 2017
Normally distributed arithmetic functions Number Theory Seminar, University of Lethbridge	October 2017
Normally distributed arithmetic functions Number Theory Seminar, University of British Columbia	October 2017
Counting irreducible divisors and irreducibles in progressions Alberta Number Theory Days, Banff International Research Station	March 2017
Counting irreducible divisors and irreducibles in progressions Number Theory Seminar, University of British Columbia	November 2016
Counting irreducible divisors and irreducibles in progressions INTEGERS 2016, University of West Georgia	October 2016
Counting irreducible divisors and irreducibles in progressions Number Theory Seminar, University of Georgia	October 2016
Orders of reductions of elliptic curves with many and few prime factors Joint Mathematics Meetings, Seattle, WA	January 2016
Orders of reductions of elliptic curves with many and few prime factors Illinois Number Theory Conference at UIUC	August 2015
Bounded gaps between primitive polynomials in $\mathbb{F}_q[t]$ Conference in Honor of Carl Pomerance's 70th Birthday, Athens, GA	June 2015
The number of prime factors of $s(n)$ AMS Sectional Meeting at the University of Alabama, Huntsville	March 2015
Bounded gaps between primitive polynomials in $\mathbb{F}_q[t]$ UGA Graduate Student Seminar	January 2015
Bounded gaps between primes in $\mathbb{F}_q[t]$ with a given primitive root Palmetto Number Theory Series XXIII at the University of South Carolina	December 2014
Audioactive Decay: John Conway and His Cosmological Theorem UGA Graduate Student Seminar	November 2014
The number of prime factors of $s(n)$ AMS Sectional Meeting at UNC Greensboro	November 2014
The Hardy-Ramanujan Theorem and related results Clemson Number Theory Seminar	October 2014
Ruth-Aaron Numbers UGA Graduate Student Seminar	March 2014

Small gaps between primes UGA Mock AMS Conference	July 2013
The Prime Number Graph VIGRE Grad Student Seminar	March 2013
Graph Pebbling UGA Mock AMS Conference	June 2012
A brief introduction to Hadamard matrices UGA Mock AMS Conference	July 2011

TEACHING EXPERIENCE

At the University of Lethbridge:

Instructor of Record

- MATH 1010: Introduction to Calculus Fall 2018

At the University of British Columbia:

Instructor of Record

- MATH 215/255: Ordinary Differential Equations Summer Term 1 2018
- MATH 312: Introduction to Number Theory Winter Term 2 2017
- MATH 100: Differential Calculus Summer Term 1 2017
with applications to physical sciences and engineering
- MATH 101: Integral Calculus Winter Term 2 2016
with applications to physical sciences and engineering
- MATH 184: Differential Calculus Winter Term 1 2016
*with applications to commerce and social sciences
for students with no prior calculus knowledge*

At the University of Georgia:

Instructor of Record

- MATH 1113: Intensive Precalculus Spring 2016
meets five days a week; three in lecture, two in computer lab
- MATH 2260: Calculus II for Science and Engineering Fall 2015
- UNIV 1101: Introduction to Precalculus Fall 2014
- MATH 5001: Arithmetic and Problem Solving Fall 2013
for future elementary school teachers
- MATH 2200: Analytic Geometry and Calculus Spring 2012
- MATH 1113: Precalculus Fall 2011

Grader

- MATH 4000/6000: Modern Algebra and Geometry I Fall 2011

Other

- MATH 1101: Introduction to Mathematical Modeling Spring 2014
campus-wide exam review session leader
- Tutoring Spring 2014
*via UGA's Academic Resource Center; tutored students in precalculus,
single- and multivariable calculus, differential equations, and other topics*

- Tennessee Governor's School Summer 2010
teaching assistant for linear algebra course for exceptional high-school students

AWARDS & HONORS

- PIMS Postdoctoral Fellowship** 2018
Fellowship awarded by the Pacific Institute for the Mathematical Sciences; one of 16 recipients
- Emma and Dick Lehmer Prize** 2017
Best talk at West Coast Number Theory 2017 (one of three prizes)
- UGA Future Faculty Fellow** AY 2015-2016
Professional development program for outstanding graduate student teachers
- William Armor Wills Memorial Scholarship Award** Spring 2015
Awarded for outstanding research by a graduate student
- RTG-AGANT Research Fellowship** Spring 2015
NSF Grant DMS-1344994
- Outstanding Teaching Assistant Award** Spring 2015
University-wide graduate student teaching award
- VIGRE Research Fellowship** August 2010 – June 2011, May 2012 – June 2013
NSF Grant DMS-0738586

SERVICE

- Co-Organizer, Alberta Number Theory Days 2019
- Referee for the International Journal of Number Theory and the INTEGERS Journal
- Panelist for NSF RTG Professional Development Seminar March 2016
- Organizer for UGA's Graduate Student Seminar Spring 2015
- Graduate student assistant for UGA High School Math Camp Summer 2014

LANGUAGES

- English** - native speaker
- German** - reading knowledge
- Computer languages: Python (self-taught)