# Robert J.S. McDonald | Curriculum Vitae

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## Education

#### University of Connecticut Storrs, CT Doctoral Program, Ph.D. in Mathematics 2019 Thesis Advisor: Álvaro Lozano-Robledo Thesis Title: Torsion Subgroups of Elliptic Curves over Function Fields Research Interests: algebraic number theory, arithmetic geometry, elliptic curves, Galois representations Willimantic, CT Eastern Connecticut State University Undergraduate Program, B.S. in Mathematics 2013 Grants and Awards Yale University: Rosenkranz Awards for Pedagogical Advancement (grant) Spring 2020 Co-PIs: Ian Adelstein, Evangelia Chalioti, John Hall University of Connecticut: Louis J. DeLuca Outstanding Teaching Assistant Award **April** 2019 March 2018 University of Connecticut: Summer Research Fellowship University of Connecticut: Doctoral Dissertation Fellowship December 2017 University of Connecticut: Connie Strange Graduate Community Award May 2016 Teaching Experience Yale University New Haven, CT Fall 2019 - Present LecturerFall 2020: Introduction to Functions and Calculus I (Coordinator) Summer 2020: Approximation and Prediction 1 Spring 2020: Introduction to Functions and Calculus II Spring 2020: Introduction to Functions of Several Variables

#### University of Connecticut

Fall 2019: Multivariable Calculus Fall 2019: Integral Calculus

Instructor & Teaching Assistant

Instructor of Record

Fall 2018: Applied Linear Algebra Spring 2018: Calc for Business and Econ Fall 2017: Calc for Business and Econ Fall 2016: Calc for Business and Econ Spring 2016: Calc for Business and Econ Summer 2015: BRIDGE Calculus Teaching Assistant

Summer 2018: CTNT Summer School GA

Storrs, CT

2013 - Present

Spring 2017: Calculus II

Summer 2016: Calc for Business and Econ Summer 2016: CTNT Summer School GA

Fall 2015: Calculus II Spring 2015: Calculus I Fall 2014: Calculus II Spring 2014: Calculus II Fall 2013: Calculus II

# Papers (available at https://mathrjsm.com/#research)

## Torsion Subgroups of Elliptic Curves over Function Fields of Genus 0

(in Journal of Number Theory Volume 193)

## Torsion Subgroups of Elliptic Curves over Function Fields of Genus 1

(submitted, current draft: https://mathrjsm.com/TorsionFunctionFieldsGenus1.pdf)

# $\frac{Talks\ Given}{\frac{Seminar\ Talks}{}}$

Undergraduate Math Club Talk, University of Connecticut	March 11, 2020
Number Theory Seminar, Wesleyan University, CT	November 22, 2019
Five College Number Theory Seminar, Amherst College	March 5, 2019
Algebra Seminar, University of Connecticut	November 28, 2018
Number Theory Seminar, Boston University	December 11, 2017
SIGMA Seminar, University of Connecticut	April 1, 2017
Undergraduate Math Club Talk, University of Connecticut	Spring 2017
Conference Talks	
AMS Sectional Meeting, Hartford, CT	April 14, 2019
2019 Joint Math Meetings, Baltimore, MD	January 19, 2019
2018 Automorphic Forms Workshop, Tufts University	March 20, 2018
Maine-Québec Number Theory Conference, University of Maine	October 14, 2017
Conferences and Workshops Attended	
Connecticut Summer School in Number Theory – Research Conference	ence June 2020
Online through University of Connecticut	
Cross Atlantic Representation Theory and Other topics ONline	May 2020
Online	
AMS Sectional Meeting	April 2019
University of Connecticut Hartford, Hartford, CT	
Northeast Consortium for Quantitative Literacy XXII Meeting	March 2019
Bay Path University, Longmeadow, MA	-
2019 Joint Math Meetings	January 2019
Baltimore, MD	3.5
Connecticut Summer School in Number Theory (CTNT)	May 2018
University of Connecticut, Storrs, CT	15 1 0010
Automorphic Forms Workshop	March 2018
Tufts University, Boston, MA	35 1 2242
Arizona Winter School: Iwasawa Theory	March 2018
University of Arizona, Tucson, AZ	0 + 1 - 2017
Maine-Québec Number Theory	October 2017
University of Maine, Orono, ME	Il / A + 2017
MSRI Summer School: Automorphic Forms and Langlands Program MSRI, Berkeley, CA	n July/August 2017
Seventh Upstate New York Number Theory Conference	May 2017
Binghamton University, Binghamton, NY	way 2011
Arizona Winter School: Perfectoid Spaces	March 2017
University of Arizona, Tucson, AZ	March 2011
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Connecticut Summer School in Number Theory August 2016 University of Connecticut, Storrs, CT Arizona Winter School: Arithmetic Geometry March 2016 University of Arizona, Tucson, AZ September 2015 BU/Keio University Workshop 2015 Boston University, Boston, MA Elliptic Curves @ UConn May 2014 University of Connecticut, Storrs, CT Advanced Technological Education (ATE) 2013 Conference Fall 2013 American Association of Community Colleges, Washington DC Service Online Experiences for Yale Scholars – Economics, Yale Math Dept. Helped write grant, plan, and contribute content Spring/Summer 2020 Peer Tutor/Undergraduate Learning Assistant Hiring, Yale Math Dept. CoordinatorSpring 2020 Peer Tutor/Undergraduate Training CoordinatorSpring/Fall 2020 Placement Exam Analyzed exam data, rewrote questions Spring 2020 Lecture Faculty Hiring, Yale Math Dept. Read applications, conducted interviews and campus visits Spring 2020 Graduate Student and New Faculty Mentoring, Yale Math Dept. Fall 2019 - Present MentorDirected Reading Program, UConn Math Dept. MentorSpring 2018 - Spring 2019 Graduate Student Mentor Program, UConn Math Dept. TA Network Coordinator Summer 2015 – Spring 2019 Fall 2014 - Spring 2019 New Teaching Orientation, UConn Math Dept. Speaker/Mentor Fall 2014 - Fall 2017 Panelist Applying to Grad School, Finding an Advisor – CTNT Conference, UConn June 1, 2018 Fall 2017 Investigations in STEM Forum – Three Rivers Community College December 4, 2017 Grad Life Q&A – SIGMA Seminar, UConn February 2, 2017 Choosing a Thesis Advisor – SIGMA Seminar, UConn April 21, 2016 Studying for Preliminary Exams – SIGMA Seminar, UConn December 11, 2015 Preparing for Math Graduate School – Math Club, UConn April 22, 2015 Spring 2014 Investigations in STEM Forum – Quinebaug Valley CC April 21, 2014

### References

Keith Conrad, kconrad@math.uconn.edu

Álvaro Lozano-Robledo, alvaro.lozano-robledo@uconn.edu

Amit A. Savkar, amit.savkar@uconn.edu (Teaching Reference)

Brett C. Smith, brett.c.smith@yale.edu (Teaching Reference)