Robert J.S. McDonald – Curriculum Vitae

Department of Mathematics, Yale University,
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https://mathrjsm.com

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

Eastern Connecticut State University — Willimantic, CT
Undergraduate Program, B.S. in Mathematics — 2013

Honors

University of Connecticut: Louis J. DeLuca Outstanding Teaching Assistant Award — April 2019
University of Connecticut: Summer Research Fellowship — March 2018
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
Lecturer — Fall 2019 – Present

Fall 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
Fall 2019: Multivariable Calculus
Fall 2019: Integral Calculus

University of Connecticut — Storrs, CT
Instructor & Teaching Assistant — 2013 – Present

Instructor
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
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

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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)

Talks Given

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	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	
Connecticut Summer School in Number Theory (CTNT)	May 2018
University of Connecticut, Storrs, CT	
Automorphic Forms Workshop	March 2018
Tufts University, Boston, MA	
Arizona Winter School: Iwasawa Theory	March 2018
University of Arizona, Tucson, AZ	
Maine-Québec Number Theory	October 2017
University of Maine, Orono, ME	
MSRI Summer School: Automorphic Forms and Langlands Program	July/August 2017
MSRI, Berkeley, CA	
Seventh Upstate New York Number Theory Conference	May 2017
Binghamton University, Binghamton, NY	
Arizona Winter School: Perfectoid Spaces	March 2017
University of Arizona, Tucson, AZ	

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	
BU/Keio University Workshop 2015	September 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

Peer Tutor/Undergraduate Learning Assistant	
Hiring Committee, Yale Math Dept.	
Coordinator	Spring 2020 – Present
Analyzed data from and rewrote Placement Exam	Spring 2020
Lecture Faculty Hiring Committee, Yale Math Dept.	Spring 2020
Directed Reading Program, UConn Math Dept.	
Mentor	Spring 2018 – Spring 2019
Graduate Student Mentor Program, UConn Math Dept.	
TA Network Coordinator	Summer 2015 – Spring 2019
Mentor	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)