Robert J.S. McDonald - Curriculum Vitae

Department of Mathematics, University of Connecticut, U-1009 341 Mansfield Road, Storrs, CT 06269-1009, USA

> 1-(860)- robert.j.mcdonald@uconn.edu http://mathrjsm.com/

Education

University of Connecticut

Storrs, CT

2013 – Present

Doctoral Program in Mathematics

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

 $2006-2007,\ 2011-2013$

Quinebaug Valley Community College

Danielson, CT

Undergraduate program, A.S. in Engineering Science

2008 - 2011

Honors

University of Connecticut: Summer Research Fellowship

University of Connecticut: Doctoral Dissertation Fellowship

University of Connecticut: Connie Strange Graduate Community Award

May 2016

Teaching Experience

University of Connecticut

Storrs, CT

2013 – Present

Instructor & Teaching Assistant

Instructor

Summer 2015: BRIDGE Calculus Spring 2016: Calculus for Business Fall 2016: Calculus for Business Fall 2017: Calculus for Business Spring 2018: Calculus for Business Fall 2018: Applied Linear Algebra

Teaching Assistant

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

Summer 2016: CTNT Summer School GA Summer 2016: Calculus for Business

Spring 2017: Calculus II

Summer 2018: CTNT Summer School GA

Eastern Connecticut State University

Internship in College Teaching - Geometry

Willimantic, CT

Fall 2012

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 (draft)

Talks Given

Seminar Talks	
Torsion Subgroups of Elliptic Curves over Function Fields	November 28, 2018
Algebra Seminar, University of Connecticut	
Torsion Subgroups of Elliptic Curves over Function Fields	December 11, 2017
Number Theory Seminar, Boston University	
ABC and Fermat for Polynomials	April 1, 2017
SIGMA Seminar, University of Connecticut	
The Fermat Equation for Polynomials	Spring 2017
Undergraduate Math Club Talk, University of Connecticut	
Conference Talks	
Torsion Subgroups of Elliptic Curves over Function Fields	March 20, 2018
2018 Automorphic Forms Workshop, Tufts University	
Torsion Subgroups of Elliptic Curves over Function Fields of Genus 0 Maine-Québec Number Theory Conference, University of Maine	October 14, 2017
Conferences and Workshops Attended	
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	v
Advanced Technological Education (ATE) 2013 Conference	Fall 2013
American Association of Community Colleges, Washington DC	

Service

Directed Reading Program, UConn Math Dept.	
Mentor	Spring 2018 – Present
Graduate Student Mentor Program, UConn Math Dept.	
TA Network Coordinator	Summer 2015 – Present
Mentor	August 2014 – Present
New Teaching Orientation, UConn Math Dept.	
Speaker	$Fall\ 2014-2017$
Mentor	$Fall\ 2014-2017$
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
Poster Session, ATE 2013 Conference	October 24, 2013

References

Keith Conrad, kconrad@math.uconn.edu

Thomas DeFranco, tom.defranco@uconn.edu (Teaching Reference)

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

 ${\bf Amit~A.~Savkar}, \, {\bf amit.savkar@uconn.edu} \,\, ({\bf Teaching~Reference})$

 ${\bf Liang~Xiao},~{\rm liang.xiao@uconn.edu}$