

PATRICK DANIELS

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EMPLOYMENT

Skidmore College Assistant Professor	<i>2023 - present</i>
University of Michigan, Ann Arbor Postdoctoral Assistant Professor	<i>2020 - 2023</i>

EDUCATION

University of Maryland, College Park PhD, Mathematics; Advisor: Thomas J. Haines MA, Mathematics	<i>2020</i> <i>2016</i>
SUNY Geneseo BA, Mathematics and Economics, <i>summa cum laude</i>	<i>2013</i>

RESEARCH INTERESTS

Arithmetic algebraic geometry: Shimura varieties, p -adic geometry, Dieudonné theory.

PUBLICATIONS

<i>G-displays and formal p-divisible groups of Hodge type</i> manuscripta mathematica, 173, no. 1-2, 45–117	<i>2024</i>
<i>A Tannakian framework for G-displays and Rapoport-Zink spaces</i> International Mathematics Research Notices, no. 22, 16963–17024	<i>2021</i>

PREPRINTS

<i>Canonical integral models for Shimura varieties of abelian type</i> Joint with Alex Youcis, submitted	<i>2024</i>
<i>Canonical integral models for Shimura varieties of toral type</i> Submitted	<i>2022</i>

INVITED CONFERENCE AND SEMINAR TALKS

University of Maryland, Number Theory and Representation Theory Seminar	<i>Mar 2024</i>
Stanford University, Number Theory Seminar	<i>Nov 2022</i>
TU Darmstadt, Algebra Seminar	<i>Nov 2022</i>
Michigan State University, Algebra Seminar	<i>Sep 2022</i>
University of Maryland, Algebra and Number Theory Seminar	<i>Apr 2022</i>
Michigan State University, Algebra Seminar	<i>Oct 2020</i>
University of Michigan, Number Theory RTG Seminar	<i>Oct 2020</i>
University of Utah, Number Theory Seminar	<i>Feb 2020</i>
University of Michigan, Group, Lie, and Number Theory Seminar	<i>Jan 2020</i>
Johns Hopkins University, Junior Number Theory Days	<i>Dec 2019</i>
Max Planck Institute for Mathematics, Bonn, Germany	<i>Sep 2019</i>
University of Maryland, Algebra and Number Theory Seminar	<i>Mar 2019</i>

GRANTS AWARDED

AMS Simons Travel Grant	2022
AMS Graduate Student Travel Grant (for JMM)	2020

AWARDS AND FELLOWSHIPS

James C. Alexander Dissertation Prize, UMD Math	2020
Ann G. Wylie Disseration Fellowship, UMD	2019
Outstanding Teaching Assistant Award, UMD	2019
Mark E. Lachtman Fellowship in Mathematics, UMD Math	2018
Ralph P. Pass III Fellowship in Number Theory, UMD Math	2018
Spotlight on Graduate Research Monroe Martin Gold Medal, UMD Math	2018
Summer Graduate Fellowship, UMD	2016
Aziz / Osborn Gold Medal in Teaching Excellence Award, UMD Math	2015
Excellence in Mathematics Award, SUNY Geneseo	2013

TEACHING EXPERIENCE

Skidmore College

Math 303: Introduction to Analysis	Spring 2024
Math 111: Calculus I	Fall 2023, Spring 2024
Math 200: Linear Algebra	Fall 2023

University of Michigan, Ann Arbor

Math 217: Linear Algebra	Fall 2020, Spring 2023
Math 312: Applied Modern Algebra	Fall 2022
Math 115: Calculus I	Fall 2021, Fall 2022
Math 612: Introduction to Lie Algebras	Winter 2021

University of Maryland, College Park

Math 107: Elementary Mathematical Modeling and Probability	Summer 2019
Math 115: Precalculus	Summer 2018
Math 110: Elementary Mathematical Modeling	Spring 2014

MENTORING

Research Experience for Undergraduates (REU), University of Michigan

Nianchen Liu, <i>Ekedahl-Oort types of Artin-Schreier curves</i>	Summer 2023
Nir Elber and Maxwell Ye, <i>Galois gerbes and a classification of abelian extensions</i>	Summer 2022
Project co-advised with Alexander Bertoloni Meli and Peter Dillery	

Reading courses

Zheng Yang, <i>Étale Cohomology</i> , University of Michigan	Summer 2021
Nicholas Hiebert-White, <i>Introduction to Schemes</i> , University of Maryland	Spring 2019
Youcef Moumena, <i>Topological Dynamics</i> , University of Maryland	Summer 2015

OUTREACH

Girls Talk Math Summer Camp, University of Maryland	Spring 2019
Number Theory Curriculum Development	

SERVICE

MAA Seaway Section Liaison	Fall 2023 - present
Referee for <i>Algebra & Number Theory</i> and <i>Annales scientifiques de l'École normale supérieure</i>	
Number Theory Lunch Organizer, University of Michigan	Fall 2021

Student Algebra / Number Theory Seminar Co-organizer, University of Maryland	<i>2018 - 2020</i>
Mathematics Department Student Representative, University of Maryland	<i>2018 - 2019</i>
Mathematics Department Tea Time Coordinator, University of Maryland	<i>2016 - 2020</i>
Directed Reading Program Committee Member, University of Maryland	<i>2015 - 2019</i>

MEMBERSHIPS

American Mathematical Society, Phi Beta Kappa