# SHEELA DEVADAS

#### sheelad.math@gmail.com

### **EDUCATION**

S.B. in Mathematics Massachusetts Institute of Technology, 6/2015

Cambridge, MA

Ph.D. in Mathematics Stanford University, 1/2021

Stanford, CA

**EMPLOYMENT** 

Research Affiliate Massachusetts Institute of Technology, 1/2025 -

Cambridge, MA

NSF Postdoctoral Fellow University of Washington, 9/2021 - 9/2024

Seattle, WA

#### PUBLICATIONS & PREPRINTS

• (With Lieblich, M.) Higher-weight Jacobians. (2024) arXiv.

• GAGA for Henselian schemes. (2023) arXiv.

• Henselian schemes in positive characteristic. (2022) arXiv.

• (With Sun, Y.) The polynomial representation of the type  $A_{n-1}$  rational Cherednik algebra in characteristic  $p \mid n$ . Communications in Algebra, 45(5), 1926-1934. (2017) doi: 10.1080/00927872.2016.1226866. arXiv.

- (With Rubinfeld, R.) A Self-Tester for Linear Functions over the Integers with an Elementary Proof of Correctness. *Theory of Computing Systems*. (2014) doi: 10.1007/s00224-015-9639-z. arXiv.
- (With Sam, S. V.) Representations of rational Cherednik algebras of G(m,r,n) in positive characteristic. Journal of Commutative Algebra, 6(4), 525-559. (2014) doi: 10.1216/JCA-2014-6-4-525. arXiv.

### FELLOWSHIPS & AWARDS

National Science Foundation Mathematical Sciences Postdoctoral Research Fellowship	National Science Foundation (NSF)	2021
NSF Graduate Research Fellowship	NSF	2015
Stanford Graduate Fellowship	Stanford University	2015
Enhancing Diversity in Graduate Education Doctoral Fellowship	Stanford University	2015
Alice T. Schafer Mathematics Prize for Excellence in Mathematics by an Undergraduate Woman	Association for Women in Mathematics	2015

### **TEACHING**

**MATH 403** Introduction to Modern Algebra (Group Theory) 3/2024 - 6/2024

University of Washington (UW)

**MATH 402** Introduction to Modern Algebra (Ring Theory) 1/2024 - 3/2024

UW

MATH 402 & 403 Introduction to Modern Algebra 1/2023 - 6/2023

UW

ASSISTANTSHIPS

Southwest Center for Arithmetic Geometry Course Assistant 3/2021 - 5/2021

Arizona Winter Semester: Virtual School in Number Theory

Quadratic Forms and the Local-Global Principle

Administrative Teaching

Assistant

Stanford University MATH 51

9/2020 - 12/2020 Linear Algebra, Multivariable Calculus

9/2018 - 12/2018

and Modern Applications

**Graduate Teaching** 

Assistant

Stanford University MATH 61DM

Modern Mathematics: Discrete Methods

Stanford University MATH 51 9/2017 - 12/2017

Linear Algebra and Differential Calculus

in Several Variables

MENTORING EXPERIENCE

Research Mentor Program for Research in Mathematics, 1/2025 -

Engineering, and Science for High School Students

MIT (Mass. Inst. of Technology)

• Suggested and defined a research problem in number theory

• Mentored and guided a high school student in this research

Lead Research Mentor 7/2018 - 8/2018 Program in Mathematics for Young Scientists

Boston University

• Mentored undergraduate counselors and high school students working on ten mathematics research projects in number theory, combinatorics, discrete probability, and other subfields

• Co-lead mentor with David Fried

Research Mentor Program for Research in Mathematics, 1/2016 - 12/2016

Engineering, and Science for High School Students

MIT

• Mentored and guided a high school student in research in combinatorial geometry

• Supervised by Prof. Ravi Vakil of Stanford University

## **INVITED TALKS**

Algebraic Geometry Seminar	Brown University	2/28/2025
Algebra, Geometry, and Number Theory Seminar	Tufts University	1/30/2025
Number Theory Seminar	Boston University	11/11/2024
Colloquium - Brauer containers	IDA CCR-Princeton	3/28/2024
Algebra and Algebraic Geometry Seminar	UW	11/2/2021

## OTHER SEMINARS

Number Theory Learning Seminar	Stanford University	2/14/2018
Number Theory Learning Seminar	Stanford University	2/22/2017

## CONFERENCES & WORKSHOPS

Collaborative Workshop in Algebraic Geometry	Institute for Advanced Study Princeton, NJ Experiments with Ceresa cycles of low genus cur	6/2024 ves
FRG workshop on Brauer groups and derived categories	Northwestern University Evanston, IL	10/2023
Stacks Project Workshop	University of Michigan Ann Arbor, MI Solid Modules and Coherent Duality	8/2023
Mathematical Sciences Research Institute (MSRI) Summer Graduate School	MSRI Berkeley, CA Automorphic Forms and the Langlands Program	7/2017 - 8/2017

### OUTREACH

Alumni Panel for Parents	Math Prize for Girls Competition Cambridge, MA	10/2024
Graduate Student Panel	Southwest Center for Arithmetic Geometry Arizona Winter Semester: Virtual School in Nu	<b>4/2021</b> mber Theory