

<b>CONTACT INFORMATION</b>	Mathematics Department University of California, Santa Cruz	Email: bdeewang@ucsc.edu Website: bdeewang.com
<b>EDUCATION</b>	<b>University of California, Santa Cruz</b> PH.D. IN MATHEMATICS Advisor: <i>Martin Weissman</i> M.A. IN MATHEMATICS  <b>Higher School of Economics</b> M.SC. IN MATHEMATICS Advisor: <i>Vadim Vologodsky</i>  <b>Shiv Nadar University</b> B.SC. (RESEARCH) IN MATHEMATICS Specialisation in Applied Algebra	California, USA Sep 2019 – present  Aug 2020  Moscow, Russia Jun 2019  Uttar Pradesh, India May 2016
<b>INVITED TALKS</b>	<b>Frobenius Trace Distributions informed by Angle Rank</b> <i>Joint Mathematics Meetings, Boston, MA</i>	Jan 2023
<b>INTERNAL TALKS</b>	<b>A Point is Worth a Shape: Introducing Moduli Spaces</b> <i>Undergraduate Student Colloquium, University of California, Santa Cruz</i>	Feb 2023
*REMOTE	<b>Angle Ranks and Frobenius Distributions*</b> <i>Graduate Student Colloquium, University of California, Santa Cruz</i>	Nov 2022
	<b>L<sup>A</sup>T<sub>E</sub>X Workshop</b> <i>Undergraduate Student Colloquium, University of California, Santa Cruz</i>	Oct 2022
	<b>Some Invariants of Abelian Varieties over Finite Fields</b> <i>Graduate Student Colloquium, University of California, Santa Cruz</i>	Oct 2022
	<b>L<sup>A</sup>T<sub>E</sub>X Workshop, Parts I &amp; II</b> <i>Undergraduate Student Colloquium, University of California, Santa Cruz</i>	Apr 2022
	<b>Cohomology on Sites*</b> <i>Graduate Student Colloquium, University of California, Santa Cruz</i>	Jan 2022
	<b>Fundamental Groups: Topological, Étale, Tannakian*</b> <i>Graduate Student Colloquium, University of California, Santa Cruz</i>	Oct 2021
	<b>Demystifying the <math>p</math>-adics*</b> <i>Graduate Student Colloquium, University of California, Santa Cruz</i>	Nov 2020
	<b>A First Introduction to Motivic Integration</b> <i>Geometric Structures on Manifolds Seminar, Higher School of Economics</i>	Jun 2019
	<b><math>p</math>-adic Integration and Betti Numbers of Calabi-Yau Varieties</b> <i>Geometric Structures on Manifolds Seminar, Higher School of Economics</i>	Dec 2018
	<b>Mordell's Theorem</b> <i>Graduate Student Seminar, Higher School of Economics</i>	May 2018

EXTERNAL TALKS	What is... a scheme?*	Oct 2021
	<a href="#">What is... a seminar?</a>	
*REMOTE	A Non-Archimedean Volume of Hilbert Scheme of Points <i>The Mathematics Society Seminar, Shiv Nadar University</i>	Aug 2019
PROGRAMMES, WORKSHOPS & CONFERENCES (selected)	<i>Unlikely Intersections, Arizona Winter School</i> <i>University of Arizona, Tuscon, USA</i>	Mar 2023
	Introductory Workshop: Diophantine Geometry <i>MSRI/SLMath, Berkeley, USA</i>	Feb 2023
	Joint Mathematics Meetings <i>Boston, USA</i>	Jan 2023
	Rethinking Number Theory* Project Leader: <i>Maria Fox</i>	Jun – Jul 2022
	<i>Automorphic Forms Beyond <math>GL_2</math>, Arizona Winter School</i> <i>University of Arizona, Tuscon, USA</i>	Mar 2022
	PCMI Graduate Summer School* <i>Number Theory Informed by Computation</i> (Week 3) <i>Motivic Homotopy Theory</i> (Week 1) <i>IAS/PCMI, Park City, Utah, USA</i>	Jul 2021
	Rethinking Number Theory* Project Leader: <i>Soumya Sankar</i>	Jul 2021
	<i>Sparsity of Algebraic Points, MSRI Summer Graduate School*</i> <i>MSRI, Berkeley, USA</i>	Jun 2021
	Rational Points and Galois Representations* <i>University of Pittsburgh, USA</i>	May 2021
	Unlikely intersections, Diophantine geometry, and related fields* <i>University of Reading, UK</i>	Apr 2021
	Connecticut Summer School in Number Theory (CTNT)* <i>University of Connecticut, Connecticut, USA</i>	Jun 2020
TEACHING	UNIVERSITY OF CALIFORNIA, SANTA CRUZ	
*REMOTE	Instructor of Record	
	MATH 105A – Real Analysis	Summer 2023*
	MATH 11B – Calculus with Applications	Summer 2022*
	MATH 100 – Introduction to Proof and Problem Solving	Summer 2022*
	MATH 103A – Complex Analysis	Spring 2022
	MATH 110 – Introduction to Number Theory	Fall 2021
	MATH 110 – Introduction to Number Theory	Summer 2021*
	MATH 105A – Real Analysis	Fall 2020*
	MATH 3 – Precalculus	Summer 2020*
	Teaching Assistant	
	MATH 288B – Pedagogy of Mathematics (GSI)	Winter 2023
	MATH 19A – Calculus for Sci., Eng., and Math.	Fall 2022
	MATH 11A – Calculus with Applications	Winter 2022
	MATH 111T – Algebra (Fellowship under SEMILLA Teach)	Spring 2021*
	MATH 100 – Introduction to Proof and Problem Solving (Fellowship under SEMILLA Teach)	Winter 2021*

MATH 3 – Precalculus	Spring 2020*
MATH 181 – History of Mathematics	Winter 2020
MATH 3 – Precalculus	Fall 2019

#### SHIV NADAR UNIVERSITY

<i>Teaching Assistant</i>	<b>MAT260 – Linear Algebra</b>	Fall 2015
<i>Tutor, LASC</i>	<b>MAT260 – Linear Algebra</b>	Spring 2015
	<b>MAT284 – Probability and Statistics</b>	Spring 2015
	<b>MAT101 – Calculus I</b>	Fall 2014
LASC = Learning & Academic Support Centre		

#### SERVICE & ORGANISING

#### UNIVERSITY OF CALIFORNIA, SANTA CRUZ

**Head TA**, for mentorship and support Jul 2022 – *present*  
*Head TA Team*, Mathematics Department

#### Directed Reading Program

*Organiser*, co-organising with David Rubinstein Aug 2021 – Jun 2024

#### Association for Women in Mathematics Chapter

*President* Sep 2022 – Aug 2023  
*General Secretary* Nov 2020 – Aug 2022

#### Mathematics Department Peer Support Program

*Organiser*, co-organising with Jennifer Guerrero, David Rubinstein, Ryan Pugh Aug 2021 – Jun 2023

#### Graduate Student Colloquium, Mathematics Department

*Organiser*, co-organised with David Rubinstein Dec 2020 – Jun 2022

#### Category Theory Learning Seminar

*Organiser*, co-organised with Vaibhav Sutrave, David Rubinstein Winter – Spring 2022

#### Reading Groups, *Organiser*

- **Topological Data Analysis** Winter 2023  
co-organised with David Rubinstein
- **Stacks** Fall 2022
- **Étale Cohomology** Fall 2021  
co-organised with Shane Kennerly, Malachi Alexander
- **Étale Homological Algebra** Spring 2021  
co-organised with Vaibhav Sutrave, Malachi Alexander
- **A Course in Arithmetic by J.-P.Serre** Winter, Summer 2020

#### Mathematics Department DEI Committee

*Graduate Student Member* Oct 2020 – Jun 2022

#### OUTREACH

#### UNIVERSITY OF CALIFORNIA, SANTA CRUZ

#### Directed Reading Program

- *Mentor*, Brooke Zhang  
COMBINATORIAL DESIGNS Fall 2022
- *Mentor* (with David Rubinstein), Kenneth Gee  
THE (CURRY–HOWARD–)LAMBEK CORRESPONDENCE Summer – Fall 2022
- *Mentor*, Miles Mitchell  
AFFINE ALGEBRAIC GROUPS AND HOPF ALGEBRAS Spring 2022

• <i>Mentor</i> , Morea Lee GALOIS THEORY OVER $\mathbf{Q}$	Winter 2022
• <i>Mentor</i> , Yijia Sun LINEAR ERROR CORRECTION CODES	Fall 2021
• <i>Mentor</i> , Anna Yoon ELLIPTIC CURVE CRYPTOGRAPHY	Winter 2020
<b>Panelist, <i>The Roles and Contributions of TAs</i></b> <i>Graduate Preparation Program</i>	Aug 2022, 2021

### Twoples

• <i>Mentor</i> , Lillian Frey (Binghamton University) INTRODUCTION TO CODING THEORY: LINEAR CODES	Sep – Dec 2022
• <i>Mentor</i> , Lalit Mohan Sharma (University of Delhi) NUMBER THEORY OF NUMBER FIELDS: CLASS GROUPS INTRODUCTION TO ALGEBRAIC GEOMETRY: VARIETIES	Jan – Apr 2022 Aug – Dec 2021
• <i>Mentor</i> , Bowen Li (Carleton College) JOURNEY THROUGH CATEGORY THEORY	Jan – Apr 2022
<b>Panelist, <i>Graduate Student Perspectives: A Year in Review</i></b> <i>Lunch in the Time of COVID</i>	May 2021

### PEDAGOGICAL & PROFESSIONAL DEVELOPMENT

UNIVERSITY OF CALIFORNIA, SANTA CRUZ	
<b>Equity-Minded Mentoring for Graduate Students Certificate Program</b> <i>Center for Innovations in Teaching and Learning</i>	Spring 2023
<b>Graduate Student Researcher, <i>Redesigning Calculus in the Life Sciences</i></b> <i>Mathematics Department &amp; Center for Innovations in Teaching and Learning</i> Fellowship under the GANAS-Career Pathways grant	Summer 2021
<b>Summer Graduate Student Instructor Peer Support Team</b> <i>Center for Innovations in Teaching and Learning</i>	Spring – Summer 2021
<b>Preparing for Inclusive Teaching</b> <i>Center for Innovations in Teaching and Learning</i>	Sep 2020, 2019
<b>Integrated Course Design for Remote Instruction</b> <i>Online Education (OE)</i>	Spring 2020
<b>Course Design &amp; Delivery Certificate Program</b> <i>Center for Innovations in Teaching and Learning</i>	Spring 2020
<b>Teaching for Equity Certificate Program</b> <i>Center for Innovations in Teaching and Learning</i>	Spring 2020

### AWARDS, GRANTS & SCHOLARSHIPS

State Funded Scholarship, Higher School of Economics	2017 – 2019
Full Merit Scholarship, Shiv Nadar University	2012 – 2016

### MEMBERSHIPS

Association for Women in Mathematics	Feb 2021 – <i>present</i>
American Mathematical Society	Oct 2019 – <i>present</i>