

CONTACT INFORMATION	Mathematics Department University of California, Santa Cruz	Email: bdeewang@ucsc.edu Website: bdeewang.com
EDUCATION	University of California, Santa Cruz PH.D. IN MATHEMATICS Advisor: <i>Martin Weissman</i> M.A. IN MATHEMATICS Higher School of Economics M.SC. IN MATHEMATICS Advisor: <i>Vadim Vologodsky</i> Shiv Nadar University B.SC. (RESEARCH) IN MATHEMATICS Specialisation in Applied Algebra	California, USA Sep 2019 – <i>present</i> Aug 2020 Moscow, Russia Jun 2019 Uttar Pradesh, India May 2016
EXTERNAL TALKS	Vertical Frobenius Trace Distributions <i>USTARS, University of Washington, Seattle, WA</i> Frobenius Trace Distributions informed by Angle Rank <i>Joint Mathematics Meetings, Boston, MA</i> What is... a scheme?* What is... a seminar?	Mar 2023 Jan 2023 Oct 2021
INTERNAL TALKS	A Point is Worth a Shape: Introducing Moduli Spaces <i>Undergraduate Student Colloquium, University of California, Santa Cruz</i> Angle Ranks and Frobenius Distributions* <i>Graduate Student Colloquium, University of California, Santa Cruz</i> Some Invariants of Abelian Varieties over Finite Fields <i>Graduate Student Colloquium, University of California, Santa Cruz</i> Cohomology on Sites* <i>Graduate Student Colloquium, University of California, Santa Cruz</i> Fundamental Groups: Topological, Étale, Tannakian* <i>Graduate Student Colloquium, University of California, Santa Cruz</i> Demystifying the p-adics* <i>Graduate Student Colloquium, University of California, Santa Cruz</i> A First Introduction to Motivic Integration <i>Geometric Structures on Manifolds Seminar, Higher School of Economics</i> p-adic Integration and Betti Numbers of Calabi-Yau Varieties <i>Geometric Structures on Manifolds Seminar, Higher School of Economics</i> Mordell's Theorem <i>Graduate Student Seminar, Higher School of Economics</i>	Feb 2023 Nov 2022 Oct 2022 Jan 2022 Oct 2021 Nov 2020 Jun 2019 Dec 2018 May 2018

OTHER TALKS	Beamer Workshop <i>Directed Reading Program, University of California, Santa Cruz</i>	Feb 2023
	L^AT_EX Workshop (with Jennifer Guerrero) <i>Undergraduate Student Colloquium, University of California, Santa Cruz</i>	Oct 2022
	L^AT_EX Workshop, Parts II: Trying tikz, tikz-cd and beamer <i>Undergraduate Student Colloquium, University of California, Santa Cruz</i>	Apr 2022
	L^AT_EX Workshop Parts I: An Introduction <i>Undergraduate Student Colloquium, University of California, Santa Cruz</i>	Apr 2022
	A Non-Archimedean Volume of Hilbert Scheme of Points <i>The Mathematics Society Seminar, Shiv Nadar University</i>	Aug 2019
PROGRAMMES, WORKSHOPS & CONFERENCES (selected) *REMOTE	Critical Issues in Mathematics Education: Mentoring for Equity <i>MSRI/SLMath, Berkeley, USA</i>	Mar 2023
	USTARS <i>University of Washington, Seattle, USA</i>	Mar 2023
	Unlikely Intersections, Arizona Winter School <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
	Automorphic Forms Beyond GL_2, Arizona Winter School <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
	Sparsity of Algebraic Points, MSRI Summer Graduate School* <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 *REMOTE	UNIVERSITY OF CALIFORNIA, SANTA CRUZ	
	<i>Instructor of Record</i> MATH 105A – Real Analysis	Summer 2023*
	MATH 103A – Complex Analysis	Spring 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*
<i>Teaching Assistant</i>	MATH 288B – Pedagogy of Mathematics (for GSIs)	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>	MAT260 – Linear Algebra	Fall 2015
<i>Tutor, LASC</i>	MAT260 – Linear Algebra	Spring 2015
	MAT284 – Probability and Statistics	Spring 2015
	MAT101 – Calculus I	Fall 2014
	LASC = Learning & Academic Support Centre	

SERVICE & ORGANISING

UNIVERSITY OF CALIFORNIA, SANTA CRUZ		
Head TA , for mentorship and support <i>Head TA Team</i> , Mathematics Department		Jul 2022 – <i>present</i>
Directed Reading Program <i>Organiser</i> , co-organising with David Rubinstein		Aug 2021 – Jun 2024
Association for Women in Mathematics Chapter <i>President</i> <i>General Secretary</i>		Sep 2022 – Aug 2023 Nov 2020 – Aug 2022
Mathematics Department Peer Support Program <i>Organiser</i> , co-organising with Jennifer Guerrero, David Rubinstein, Ryan Pugh		Aug 2021 – Jun 2023
Graduate Student Colloquium, Mathematics Department <i>Organiser</i> , co-organised with David Rubinstein		Dec 2020 – Jun 2022
Category Theory Learning Seminar <i>Organiser</i> , co-organised with Vaibhav Sutrave, David Rubinstein		Winter – Spring 2022
Reading Groups , <i>Organiser</i>		
• Topological Data Analysis co-organised with David Rubinstein		Winter 2023
• Stacks		Fall 2022
• Étale Cohomology co-organised with Shane Kennerly, Malachi Alexander		Fall 2021
• Homological Algebra co-organised with Vaibhav Sutrave, Malachi Alexander		Spring 2021
• A Course in Arithmetic by J.-P.Serre		Winter & Summer 2020

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
- *Mentor*, Morea Lee
GALOIS THEORY OVER \mathbb{Q} Winter 2022
- *Mentor*, Yijia Sun
LINEAR ERROR CORRECTION CODES Fall 2021
- *Mentor*, Anna Yoon
ELLIPTIC CURVE CRYPTOGRAPHY Winter 2020

Panelist, *The Roles and Contributions of TAs*

Graduate Preparation Program Aug 2022, 2021

EXTERNAL

Twoples

- *Mentor*, Lillian Frey (Binghamton University)
INTRODUCTION TO CODING THEORY: LINEAR CODES Sep – Dec 2022
- *Mentor*, Lalit Mohan Sharma (University of Delhi)
NUMBER THEORY OF NUMBER FIELDS: CLASS GROUPS Jan – Apr 2022
INTRODUCTION TO ALGEBRAIC GEOMETRY: VARIETIES Aug – Dec 2021
- *Mentor*, Bowen Li (Carleton College)
JOURNEY THROUGH CATEGORY THEORY Jan – Apr 2022

Panelist, *Graduate Student Perspectives: A Year in Review*

Lunch in the Time of COVID May 2021

PEDAGOGICAL
& PROFESSIONAL
DEVELOPMENT

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

Equity-Minded Mentoring for Graduate Students Certificate Program

Center for Innovations in Teaching and Learning Winter 2023

Graduate Student Researcher, *Redesigning Calculus in the Life Sciences*

Mathematics Department & Center for Innovations in Teaching and Learning Summer 2021
Fellowship under the GANAS-Career Pathways grant

Summer Graduate Student Instructor Peer Support Team

Center for Innovations in Teaching and Learning Spring – Summer 2021

Preparing for Inclusive Teaching

Center for Innovations in Teaching and Learning Sep 2020, 2019

Integrated Course Design for Remote Instruction

Online Education (OE) Spring 2020

Course Design & Delivery Certificate Program

Center for Innovations in Teaching and Learning Spring 2020

Teaching for Equity Certificate Program
Center for Innovations in Teaching and Learning

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 – *present*

American Mathematical Society

Oct 2019 – *present*
