

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>Juncue Suh</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 – present Aug 2020 Moscow, Russia Jun 2019 Uttar Pradesh, India May 2016
INVITED TALKS	Frobenius Trace Distributions informed by Angle Rank <i>Joint Mathematics Meetings 2023</i>	Jan 2023
INTERNAL TALKS	Frobenius Distributions of Abelian Varieties over Finite Fields <i>Graduate Student Colloquium, University of California, Santa Cruz</i>	Nov 2022
*REMOTE	L^AT_EX Workshop(s) <i>Undergraduate Student Colloquium, University of California, Santa Cruz</i>	Oct, Apr 2022
	Some Invariants of Abelian Varieties over Finite Fields <i>Graduate Student Colloquium, University of California, Santa Cruz</i>	Oct 2022
	Cohomology on Sites* <i>Graduate Student Colloquium, University of California, Santa Cruz</i>	Jan 2022
	Fundamental Groups: Topological, Étale, Tannakian* <i>Graduate Student Colloquium, University of California, Santa Cruz</i>	Oct 2021
	Demystifying the p-adics* <i>Graduate Student Colloquium, University of California, Santa Cruz</i>	Nov 2020
	A First Introduction to Motivic Integration <i>Geometric Structures on Manifolds Seminar, Higher School of Economics</i>	Jun 2019
	p-adic Integration and Betti Numbers of Calabi-Yau Varieties <i>Geometric Structures on Manifolds Seminar, Higher School of Economics</i>	Dec 2018
	Mordell's Theorem <i>Graduate Student Seminar, Higher School of Economics</i>	May 2018
EXTERNAL TALKS	What is... a scheme?* <i>What is... a seminar?</i>	Oct 2021
*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) *REMOTE	Joint Mathematics Meetings <i>Boston, USA</i>	Jan 2023
	Rethinking Number Theory* <i>Ekedahl-Oort Strata for Abelian Varieties under 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 (Week 3)</i> <i>Motivic Homotopy Theory (Week 1)</i> <i>IAS/PCMI, Park City, Utah, USA</i>	Jul 2021
	Rethinking Number Theory* <i>Invariants of p-torsion in characteristic p under Soumya Sankar</i>	Jul 2021
	Sparsity of Algebraic Points, MSRI Summer Graduate School* <i>MSRI, Berkeley, California, USA</i>	Jun 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 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 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>
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Directed Reading Program <i>Organiser</i> , co-organising with David Rubinstein, Nathan Marianovsky	Aug 2021 – present
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 David Rubinstein, Jennifer Guerrero, 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, Organiser	
• Stacks	Fall 2022
• Étale Cohomology co-organised with Shane Kennerly, Malachi Alexander	Fall 2021
• Étale Homological Algebra co-organised with Vaibhav Sutrave, Malachi Alexander	Spring 2021
• A Course in Arithmetic by J.-P.Serre	Winter, Summer 2020
Mathematics Department DEI Committee <i>Graduate Student Member</i>	Oct 2020 – Jun 2022

OUTREACH

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

Directed Reading Program

- *Mentor*, Brooke Zhang
COMBINATORIAL DESIGN THEORY
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

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
INTRODUCTION TO ALGEBRAIC GEOMETRY: VARIETIES
Jan – Apr 2022
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

Graduate Student Researcher, *Redesigning Calculus in the Life Sciences*
Mathematics Department
& *Center for Innovations in Teaching and Learning (CITL)*
Fellowship under the GANAS-Career Pathways grant

Summer 2021

Summer GSI (Graduate Student Instructor) Peer Support Team
Center for Innovations in Teaching and Learning (CITL)

Spring – Summer 2021

Preparing for Inclusive Teaching
Center for Innovations in Teaching and Learning (CITL)
& *Hispanic Serving Institution (HSI) Initiatives*

Sep 2020, 2019

Integrated Course Design for Remote Instruction
Online Education (OE)

Spring 2020

Graduate Certificate in Course Design & Delivery
Center for Innovations in Teaching and Learning (CITL)

Spring 2020

Graduate Certificate in Teaching for Equity
Center for Innovations in Teaching and Learning (CITL)

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*

LANGUAGES

English, Hindi (Hindustani), Telugu, Japanese (Beginner)
