

Debanjana Kundu

Curriculum Vitae

Last Updated: September 30, 2025

PERSONAL DETAILS

Address CW307.14, URegina, 3737 Wascana Parkway, Regina, SK Canada
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EDUCATION

MA PhD	2015–2020
<i>University of Toronto, Toronto, Canada</i>	
BS-MS Dual Degree	2010–2015
<i>Indian Institute of Science Education and Research, Mohali, India</i>	

CGPA 9.7

EMPLOYMENT

University of Regina	July 2025–present
<i>Assistant Professor</i>	
University of Texas Rio Grande Valley	September 2023–August 2025
<i>Assistant Professor</i>	
Fields Institute, Toronto	January–June 2023
<i>Visiting Researcher</i>	
University of British Columbia, Vancouver	January 2021–December 2022
<i>PIMS PostDoc Fellow</i>	
Université de Montréal	Fall 2020
<i>CRM PostDoc, Thematic Program: Cohomology in Arithmetic</i>	

ACADEMIC VISITS

Lodha Math (India)	Aug–Dec 2025
<i>Thematic Program on Arithmetic Statistics</i>	

AWARDS, GRANTS, AND PRIZES

NSF Conference Grant DMS-2442586	2025
<i>Automorphic Forms Workshop 2025 (\$33,800)</i>	
AWM–NSF Mentoring Travel Grant	2025
<i>pre-tenure travel grant for one month research visit (\$5000)</i>	
AMS–Simons Travel Grant	2024–26
<i>Early career travel grant (\$2500/year)</i>	
Malcolm Slingsby Robertson Prize in Mathematics	2020
<i>University of Toronto (best thesis award)</i>	
General Motors Women in Mathematics and Science Award	2019–2020
<i>University of Toronto</i>	

Vivekananda Graduate Award for International Students	2018–2019
<i>University of Toronto</i>	
Academic Excellence Award (three times)	2010–2015
<i>IISER Mohali (for SGPA 10 in three semesters)</i>	

FELLOWSHIPS

SLMath 2025 Summer Research in Mathematics	Summer 2025
<i>Simons Laufer Mathematical Sciences Institute, Berkeley</i>	
IAS Summer Research Fellowship	Summer 2022
<i>Institute for Advanced Study, Princeton</i>	
PIMS Postdoctoral Fellowship	January 2021–December 2022
<i>University of British Columbia, Vancouver</i>	
CRM Postdoctoral Fellowship	Fall 2020
<i>Université de Montréal</i>	
MITACS Graduate Fellowship	2015–2018
<i>Canada</i>	
BIGS Scholarship for Graduate Studies (not availed)	2015–2018
<i>Hausdorff Center for Mathematics, Bonn, Germany</i>	
TIFR VSRP Fellowship	2015
<i>TIFR, India</i>	
Rhodes Scholarship finalist (top 18)	Class of 2015
<i>Oxford University, UK</i>	
MITACS Globalink Research Internship	2014
<i>Canada</i>	
IAS Summer Fellowship (not availed)	2013
<i>Indian Academy of Sciences, India</i>	
DAAD WISE Scholarship	2013
<i>Germany</i>	
JNCASR Summer Fellowship	2012
<i>JNCASR, India</i>	
INSPIRE Fellowship	2010–2015
<i>Department of Science and Technology, Government of India</i>	

PUBLICATIONS

1. Generalized Mazur's Growth Number Conjecture (with A. Lei)
accepted for publication in Bull. Aust. Math. Soc
2. The first level of \mathbb{Z}_p -extensions and compatibility of heuristics (with L. C. Washington)
Research in Mathematical Sciences 12 (2025), article number 68
3. Elliptic curves of conductor $2^m p$, quadratic twists, and Watkins's conjecture (with J. Hatley)
accepted for publication in Ann. Math. du Que.
4. Murmurations of Modular Forms and p -power Coefficients (with K. Müller)
accepted for publication in Math. Proc. Cambridge Philos. Soc.
5. Class groups and Selmer groups in Special Families (with Abhishek S.)
accepted for publication in Canadian Math Bulletin
6. Mazur's Growth Number Conjecture in the Rank One Case (with A. Lei)
accepted for publication in Quarterly J. Math
7. Derived p -adic heights and the leading coefficient of the Bertolini-Darmon-Prasanna p -adic L -function (with F. Castella, C.-Y. Hsu, Y.-S. Lee, and Z. Liu)
Trans. Amer. Math. Soc. Ser. B 12 (2025), 748–788

8. Hilbert's 10-th Problem via Mordell curves (with S. Jha, D. Majumdar)
accepted for publication in Canadian Math Bulletin
9. On a conjecture of Mazur predicting the growth of Mordell–Weil ranks in \mathbb{Z}_p -extensions
 (with R. Gajek-Leonard, J. Hatley, A. Lei)
accepted for publication in Math Research Letters
10. Statistics for anti-cyclotomic Iwasawa invariants of elliptic curves (with J. Hatley & A. Ray)
Math Z., Volume 307, article number 49, (2024)
11. Studying Hilbert's 10th problem via explicit elliptic curves (with A. Lei & F. Sprung)
Math. Ann. 390, 5153–5183 (2024)
12. Statistics for Iwasawa Invariants of Elliptic Curves II (with A. Ray)
Int. J. Number Theory (2024), Volume No. 20, Issue No. 04, 1099 – 1124
13. Heuristics for anti-cyclotomic \mathbb{Z}_p -extensions (with L. Washington)
Experimental Mathematics, 33(4), 644–662 (2024)
14. Cotorision of anti-cyclotomic Selmer groups on average (with F. Sprung)
Proceedings of the American Math Society 152 (2024), 521-535
15. Rank jumps and growth of Shafarevich–Tate groups for elliptic curves in $\mathbb{Z}/p\mathbb{Z}$ -extensions
 (with L. Beneish and A. Ray)
J. Aus. Math. Soc., Volume 116 (2024), Issue 1, pp. 1–38
16. Non-vanishing modulo p of Hecke L -values over imaginary quadratic fields (with A. Lei)
Israel Journal of Math, Volume 266 (2025), pages 307–339
17. Structure of fine Selmer Groups in p -adic Lie Extensions (with R. Sujatha & F. Nuccio)
Osaka J. Math. 61(1): 121–146 (January 2024).
18. Growth of p -parts of ideal class groups and fine Selmer groups in \mathbb{Z}_q -extensions with $p \neq q$
 (with A. Lei)
Acta Arithmetica 207 (2023), no. 4, 297–313
19. λ -invariant stability in Families of Modular Galois Representations (with J. Hatley)
Research in Mathematical Sciences 10 (2023), article number 33
20. On the fine Selmer groups of modular forms and duality (with J. Hatley, A. Lei, & J. Ray)
The Ramanujan Journal (2023) Volume 60, pp. 237–258
21. Control Theorems of Fine Selmer Groups (with M. F. Lim)
Journal de théorie des nombres de Bordeaux, Volume 34 (2022) no. 3, pp. 851–880
22. Iwasawa Invariants for elliptic curves over \mathbb{Z}_p -extensions and Kida's Formula (with A. Ray)
Forum Math. 34 (2022), no. 4, 945–967
23. Arithmetic Statistics and Non-Commutative Iwasawa Theory (with A. Lei & A. Ray)
Documenta Mathematica (2022) Volume 27, pp. 89–149
24. Statistics for Iwasawa Invariants of Elliptic Curves (with A. Ray)
Transactions of the American Mathematical Society (2021) Volume 374/ Issue 11; pp. 7945–7965
25. Anticyclotomic μ -Invariants of Residually Reducible Galois Representations (with A. Ray)
Journal of Number Theory (2022) Volume 234, pp. 476–498
26. On an Analogue of Kida's Formula for Fine Selmer Groups
Journal of Number Theory (2021) Volume 222; pp. 249–261
27. Perfect Powers that are Sums of Squares of an AP (with V. Patel)
Rocky Mountain Journal of Mathematics (2021) Volume 51 / No. 3 pp. 933–949
28. Growth of Fine Selmer Groups in Uniform pro- p Extensions
Annales Mathématiques du Québec (2021) Volume 45, pp. 347–362

29. Growth of p -Fine Selmer Groups and p -Fine Shafarevich-Tate Group in $\mathbb{Z}/p\mathbb{Z}$ -Extensions
Journal of the Ramanujan Math Society (2021) Volume 36, No. 1
30. Growth of Fine Selmer Groups in Infinite Towers
Canadian Mathematics Bulletin (2020) Volume 63 / Issue 4 pp. 921–936

PREPRINTS

1. Beyond Endoscopy via Trace Formula for $\mathrm{GL}(2, F)$ (with M. Emory, M. Espinosa Lara, T.A. Wong) *available on the arXiv, submitted*
2. On the p -ranks of class groups of certain Galois extensions (with U. Asarhasa, R. Gambheera, E. Nunez Lon-wo, A. Sheth) *available on the arXiv, submitted*
3. Iwasawa Theory of Graphs and their duals (with K. Müller) *available on the arXiv, submitted*
4. Iwasawa Theory of Elliptic Curves in Quadratic Twist Families (with K. Müller) *available on the arXiv, submitted*
5. Structure of (Fine) Mordell–Weil Groups (with R. Gambheera) *available on the arXiv, submitted*

SEMINARS

TBA	November 2025
<i>Invited talk, TIFR (India)</i>	
Iwasawa Theory of Elliptic Curves in Quadratic Twist Families	July 2025
<i>Invited talk, University of Ottawa</i>	
p-ranks of class groups via Galois cohomology	April 2025
<i>Invited talk, University of North Texas</i>	
Elliptic Curves, Quadratic Twists, and Watkins’s Conjecture	March 2025
<i>Invited talk (pure math seminar), UTRGV (Brownsville campus)</i>	
Arithmetic of Elliptic Curves via Iwasawa Theory	November 2024
<i>Invited colloquium talk, University of Regina</i>	
p-ranks of class groups via Galois cohomology	October 2024
<i>Invited talk, Michigan State University</i>	
Studying Hilbert’s 10th Problem via Explicit Elliptic Curves	April 2024
<i>Invited talk, University of Texas Tyler</i>	
Studying Hilbert’s 10th Problem via Explicit Elliptic Curves	April 2024
<i>Invited talk (pure math seminar), UTRGV (Brownsville campus)</i>	
Beyond Endoscopy via Poisson Summation for $\mathrm{GL}(2, K)$	March 2024
<i>Invited talk, University of Toronto</i>	
Growth of Mordell–Weil ranks in \mathbb{Z}_p-extensions	February 2024
<i>Invited talk, University of Georgia</i>	
Growth of Mordell–Weil ranks in \mathbb{Z}_p-extensions	February 2024
<i>Invited talk, UBC Vancouver video</i>	
Growth of Mordell–Weil ranks in \mathbb{Z}_p-extensions	November 2023
<i>Invited talk, UC Santa Barbara</i>	
Iwasawa Theory and Arithmetic Statistics	April 2023
<i>Invited talk, IIT Gandhinagar</i>	
Iwasawa Theory and Arithmetic Statistics	April 2023
<i>Invited talk, Ashoka University</i>	
$p \neq q$ Iwasawa Theory	March 2023
<i>Invited talk, IISc Bangalore</i>	
$p \neq q$ Iwasawa Theory	March 2023
<i>Invited talk, ISI Bangalore</i>	
Heuristics for Iwasawa invariants in anti-cyclotomic \mathbb{Z}_p-extensions	January 2023
<i>Invited talk, University of Waterloo</i>	

Heuristics for Iwasawa invariants in anti-cyclotomic \mathbb{Z}_p-extensions	November 2022
<i>Invited talk, Arizona State University, Tempe</i>	
Iwasawa Theory and Arithmetic Statistics	November 2022
<i>Invited colloquium talk, Fordham University</i>	
Heuristics for Iwasawa invariants in anti-cyclotomic \mathbb{Z}_p-extensions	November 2022
<i>Invited talk, Philadelphia Area Number Theory Seminar, Bryn Mawr</i>	
Studying Hilbert's 10th Problem via Explicit Elliptic Curves	October 2022
<i>Invited talk, IIT Bombay, India</i>	
Studying Hilbert's 10th Problem via Explicit Elliptic Curves	October 2022
<i>Invited talk, University of Washington, Seattle</i>	
Iwasawa Theory and Arithmetic Statistics	October 2022
<i>Invited colloquium talk, HRI Allahabad, India</i>	
Studying Hilbert's 10th Problem via Explicit Elliptic Curves	October 2022
<i>Invited talk, University of Lethbridge</i>	
Studying Hilbert's 10th Problem via Explicit Elliptic Curves	September 2022
<i>Invited talk, HRI Allahabad, India</i>	
Studying Hilbert's 10th Problem via Explicit Elliptic Curves	August 2022
<i>Invited talk, IMSc Chennai, India</i>	
Fine Selmer Groups, Modular Forms, and Duality	February 2022
<i>Invited talk, Iwasawa Theory Virtual Seminar video (use passcode: upUiJL8%)</i>	
Iwasawa Theory and Arithmetic Statistics	January 2022
<i>Invited talk, Fields Institute Number Theory Seminar video</i>	
Iwasawa Theory and Arithmetic Statistics	November 2021
<i>Invited talk, IISER Mohali Online Colloquium video</i>	
Iwasawa Theory and Arithmetic Statistics	November 2021
<i>Invited talk, Möbius ANT, CRM Montreal</i>	
Iwasawa Theory and Arithmetic Statistics	October 2021
<i>Invited talk, Ohio State University</i>	
Iwasawa Theory and Arithmetic Statistics	June 2021
<i>Invited talk, University of Göttingen</i>	
Iwasawa Theory	Summer 2021
<i>Invited lecture series (3 lectures), Seoul National University</i>	
Iwasawa Theory of Fine Selmer Groups	March 2021
<i>Invited talk, Number Theory Seminar, University of Toronto</i>	
Iwasawa Theory of Fine Selmer Groups	February 2021
<i>Invited talk, PIMS Online Colloquium</i>	
Iwasawa Theory of Fine Selmer Groups	November 2020
<i>Invited talk, Fields Institute Number Theory Seminar video</i>	
Overview of Iwasawa Theory	October 2020
<i>Invited talk, Junior Number Theory Seminar, University of Toronto</i>	
Iwasawa Theory of Fine Selmer Groups	January 2020
<i>Invited talk, QVNTS, Montreal</i>	
Iwasawa Theory and Pseudo-nullity Conjectures	January 2020
<i>Invited talk, Algebra & Number Theory Seminar, Université Laval</i>	
Pigeonhole Principle and its Applications	January 2020
<i>Graduate Seminar, Department of Math, University of Toronto</i>	
Möbius Functions and Number Theory	Summer 2019
<i>Math Camp, Department of Math, University of Toronto</i>	
Fun with Tilings	Fall 2018
<i>Graduate Seminar, Department of Math, University of Toronto</i>	
What is an Elliptic Curve?	April 2017
<i>Graduate Seminar, Department of Math, University of Toronto</i>	
Understanding the Rank Distribution Conjecture	November 2016
<i>Graduate Seminar, Department of Math, University of Toronto</i>	
Principal L-Functions of the Linear Group	August 2016
<i>Department of Math, University of Toronto</i>	
Linear Groups- Malcev's Theorem and Selberg's Lemma	April 2014
<i>IISER Mohali</i>	

Proofs of Quadratic Reciprocity	April 2014
<i>Department Colloquium, IISER Mohali</i>	
27 Lines on a Cubic	November 2013
<i>Department Colloquium, IISER Mohali</i>	
Introduction to Game Theory	Aug 2012
<i>Mathematics Club, IISER Mohali</i>	

CONFERENCES, WORKSHOPS, AND SUMMER SCHOOLS

Women in Numbers 7	June 2026
<i>Project Leader</i>	
ICTS: Automorphic Forms and the Bloch–Kato Conjecture	May 2025
<i>Invited talk</i>	
37th Automorphic Forms Workshop	Apr–May 2025
<i>Co-Organizer</i>	
Oregon Number Theory Days	March 2025
<i>Contributed talk</i>	
AMS Fall Central Sectional Meeting	September 2024
<i>Invited talk (session: L-Functions and Automorphic Forms)</i>	
Canadian Number Theory Association (CNTA) Conference XVI	June 2024
<i>Invited talk video</i>	
Brin MRC Workshop - Vistas in Number Theory	June 2024
<i>Invited talk</i>	
Texas-Oklahoma Representations and Automorphic forms (TORA)	October 2023
<i>Invited talk</i>	
Rethinking Number Theory	June 2023
<i>Project Leader</i>	
CMS Summer Meeting	June 2023
<i>Invited talk, Session: Arithmetic aspects of automorphic forms</i>	
Special values of L-functions, Paderborn University (Germany)	March 2023
<i>Invited talk</i>	
5 Day Workshops at BIRS, Banff	January 2023
<i>Workshop on Arithmetic Aspects of Deformation Theory</i>	
PRIMA Congress	December 2022
<i>Invited talk, Session: Arithmetic geometry: theory and computation</i>	
CMS Winter Meeting	December 2022
<i>Invited talk, Session: Diophantine Arithmetic Geometry and Number Theory</i>	
Pair of Automorphic Workshops	August 2022
<i>part of Castella–Liu research group</i>	
Women in Maths: Progress and Challenges, IIT Jodhpur	May 2022
<i>Invited talk</i>	
Maine-Quebec Number Theory Conference	October 2021
<i>Contributed talk</i>	
Workshop on Arithmetic Statistics Problems	July 2021
<i>Invitation-only Conference</i>	
CMS Summer Meeting	June 2021
<i>Invited talk, Session: Algebraic Number Theory</i>	
AIM Workshop, Online	January 2021
<i>Workshop on Arithmetic Intersection Theory on Shimura Varieties</i>	
John's Hopkins Junior Number Theory Days	December 2020
<i>Invited Talk notes video</i>	
Maine-Quebec Number Theory Conference	Fall 2020
<i>Contributed talk slides video</i>	
CTNT Conference, University of Connecticut	June 2020
<i>Contributed talk slides</i>	
MAAIM, Emory University	November 2019
<i>Contributed talk</i>	

Maine-Quebec Number Theory Conference	October 2019
<i>Contributed talk</i>	
PAlmetto Number Theory Seminar (PANTS) XXXII	September 2019
<i>Invited talk</i>	
Boston University-Keio University Workshop	June 2019
<i>Contributed talk</i>	
SOGMSC, University of Guelph	June 2019
<i>Contributed talk</i>	
Analytic & Combinatorial Number Theory, UIUC	June 2019
<i>Contributed talk</i>	
Montreal-Toronto Workshop in Number Theory, CRM	March 2019
<i>Workshop on p-adic Hodge Theory</i>	
CNTA Conference, Universite Laval	July 2018
<i>Contributed talk</i>	
CTNT Summer School, University of Connecticut	May 2018
<i>Summer School and Conference</i>	
Strength in Numbers, Queen's University	May 2018
<i>Graduate Student Conference, Contributed talk</i>	
Upstate Number Theory Conference, SUNY Buffalo	April 2018
<i>Young Researchers Conference</i>	
PIMS Focus Period, UBC Vancouver	March 2018
<i>Focus Period on Representations in Arithmetic</i>	
Arizona Winter School, Tucson	March 2018
<i>Winter school on Iwasawa Theory</i>	
Montreal-Toronto Workshop in Number Theory, CRM	January 2018
<i>Workshop on Unitary Shimura Varieties</i>	
AIM Workshop, San Jose	December 2017
<i>Workshop on Functoriality and the Trace Formula</i>	
Summer Graduate School, MSRI	July 2017
<i>Summer school on Automorphic Forms and Langlands Program</i>	
5 Day Workshops at BIRS, Banff	July 2017
<i>Workshop on Diophantine Approximation and Algebraic Curves</i>	
Montreal-Toronto Workshop in Number Theory, CRM	December 2016
<i>Workshop on Mock Modular Forms</i>	
PIMS Summer School, UBC Vancouver	July 2016
<i>Summer School on Representation Theory of Finite Groups</i>	
Summer Graduate School, MSRI	July 2016
<i>Summer school on Introduction to Character Theory and the McKay Conjecture.</i>	

ORGANIZATION: SEMINARS AND MINI-COURSES

Automorphic Forms Workshop	Spring 2025
<i>co-organizer</i>	
CMS Session on Arithmetic Aspects of Galois representations	Fall 2024
<i>Winter CMS Meeting</i>	
AMS Special Session on Additive Number Theory and Modular Forms	Fall 2024
<i>Fall Central Sectional Meeting</i>	
UTRGV Algebra/Number Theory Seminar	2023 – 25
<i>SMSS, UTRGV</i>	
Beyond Endoscopy Mini Conference	April 2023
<i>Lead Organizer</i>	
UBC Number Theory Seminar	2021- 2022
<i>Department of Mathematics, UBC Vancouver</i>	
Learning Seminar on Quadratic Twists	Winter 2021
<i>Iwasawa Seminar, online</i>	
Learning Seminar on Eigenvarieties	Winter 2021
<i>Iwasawa Seminar, Department of Math, UBC Vancouver notes</i>	

Learning Seminar on Euler system and Eisenstein congruences	Fall 2020
<i>Iwasawa Seminar, Department of Math, UBC Vancouver</i>	
CRM Women's Seminar	Fall 2020
<i>Part of the thematic program at CRM</i>	
Learning Seminar on Coleman Families of Modular Forms	Fall 2020
<i>Part of the thematic program at CRM</i>	
Learning Seminar on Abelian ℓ-Adic Representations	Summer 2020
<i>Graduate Seminar, Department of Math, University of Toronto</i>	
CMS Mini-Course on Iwasawa Theory	December 2019
<i>Co-organizer with R. Sujatha</i>	
Learning Seminar on Tate Conjectures	Fall 2019
<i>Graduate Seminar, Department of Math, University of Toronto</i>	
Learning Seminar on p-adic Lie Groups	Summer 2019
<i>Graduate Seminar, Department of Math, University of Toronto</i>	
Learning Seminar on Complex Multiplication	Fall 2018
<i>Graduate Seminar, Department of Math, University of Toronto</i>	
Learning Seminar on Etale Cohomology	Winter 2018
<i>Graduate Seminar, Department of Math, University of Toronto</i>	
Learning Seminar on Beyond Endoscopy	2017–18
<i>Graduate Seminar, Department of Math, University of Toronto</i>	
Learning Seminar on Classical Iwasawa Theory	Fall 2017
<i>Graduate Seminar, Department of Math, University of Toronto</i>	
Introduction to Automorphic Forms and Langlands Program	Fall 2017
<i>Graduate Seminar, Department of Math, University of Toronto</i>	
Summer Learning Seminar on Galois Cohomology	Summer 2017
<i>Graduate Seminar, Department of Math, University of Toronto</i>	
Summer Learning Seminar on Modular Forms	Summer 2017
<i>Graduate Seminar, Department of Math, University of Toronto</i>	

TEACHING ASSISTANCE EXPERIENCE

University of Toronto:

MAT223 (Linear Algebra)	multiple times
<i>Instructor: S. Uppal</i>	
MAT235 (Multivariable Calculus)	multiple times
<i>Instructor: Dr. N. Jung</i>	
MAT237 (Multivariable Calculus)	multiple times
<i>Instructor: Dr. T. Holden, Prof. R. Gerrard</i>	
MAT240 (Linear Algebra for Math Specialists)	multiple times
<i>Instructor: Prof. E. Meinrenken</i>	
MAT246 (Concepts in Abstract Math)	multiple times
<i>Instructor: Dr. J. Korman, Dr. H. Soheil, Prof. F. Murnaghan, Dr. D. Burbulia</i>	
MAT247 (Linear Algebra II for Math Specialists)	Winter 2018
<i>Instructor: Prof. S. Kudla</i>	
MAT315 (Elementary Number Theory)	Winter 2020
<i>Instructor: Prof. H. Kim</i>	
MAT336 (Elements of Analysis)	Winter 2017
<i>Instructor: Dr. H. Soheil</i>	
MAT401 (Polynomial Equations and Fields)	Summer 2017
<i>Instructor: Dr. J. Korman</i>	

TEACHING EXPERIENCE

University of Regina:

MATH108 (Mathematical Problems, Ideas, and Personalities)	Winter 2026
MATH223 (Introduction to Abstract Algebra)	Winter 2026

UTRGV:

MATH4364 (Modern Algebra II)	Spring 2025
MATH2318 (Linear Algebra)	Fall 2024
MATH3363 (Modern Algebra I)	Spring 2024
MATH2413 (Calculus I)	Fall 2023

University of British Columbia (Vancouver):

MAT152 (Linear Systems)	Winter 2022
<i>Course Coordinator: Prof. K. Karu</i>	
MAT105 (Integral Calculus for Social Sciences and Commerce)	Winter 2021

Course Coordinator: Prof. K. Liu

University of Toronto:

MAT237 (Multivariable Calculus)	Summer 2020
<i>Course Coordinator with Dr. T. Ens, A. Pannu, and Dr. R. Zhu</i>	
MAT136 (Calculus II)	Summer 2019
<i>Course Coordinator with Dr. D. Le and A. Oswal</i>	
MAT136 (Calculus II)	Winter 2019
<i>Course Coordinator: Dr. S. Mayes-Tang</i>	
MAT188 (Linear Algebra)	Fall 2018
<i>Course Coordinator: Dr. D. Burbulla</i>	

ACADEMIC SERVICES

Refereed for

Mathematika, The Ramanujan Journal, Nagoya Math Journal,
Annales Mathématiques du Québec, Canadian Math Bulletin,
Czechoslovak Mathematical Journal, Forum Mathematicum,
Documenta Math, Acta Arithmetica, Abh. Math. Semin. Univ. Hambg,
Mathematics of Computation, Pure and Applied Mathematics Quarterly
Proceedings of the AMS, Math Research Letters

Reviewer for Examiner for

Mathematics Reviews, BIRS grant proposals
Christopher M. Stokes (PhD candidate, Arizona State University, 2023)
Paul Marsh (Masters thesis committee, UTRGV, Fall 2023)
Jacob Gutierrez (Masters thesis committee, UTRGV, Fall 2023)
Raul Alvarez (Masters thesis committee, UTRGV, Spring 2025)
Linoy Utkina (Masters thesis committee, UTRGV, Spring 2025)
Joselyne Aniceto (PhD thesis committee, UTRGV, Spring 2025)
Jeffery Opoku (PhD thesis committee, UTRGV, Summer 2025)

BACHELORS THESIS/PROJECT SUPERVISION

Raul Marquez (UTRGV)	Fall 2024
<i>Bachelors capstone project</i>	

Vitthal Yellambalse (BITS Pilani, Goa campus)	Jan – May 2022
<i>Bachelors project on theory of cyclotomic fields</i>	

Adithya Chakravarthy (University of Toronto)	2021 – 2023
<i>research on the Iwasawa theory of fine Selmer groups (thesis)</i>	

MASTERS THESIS/PROJECT SUPERVISION

Ama Quansah (UTRGV)
Masters project

Fall 2024

MENTORSHIP

Undergraduate Mentorship	2023–present
Arkapriyo Hore; <i>ISI Bangalore (May–July 2025): Galois Cohomology and Brauer–Severi varieties</i>	
Alejandro Delgado; <i>UTRGV (Fall 2024): Advanced Linear Algebra</i> .	
Aniruddha Mondal; <i>IISER Mohali (May–July 2024): p-adic numbers.</i>	
Parkhi Nandini Mandar; <i>IISER Bhopal (May–July 2024): p-adic numbers.</i>	
Raul Marquez; <i>UTRGV (Sep 2023–Apr 2024): Topics in number theory.</i>	
Samyak Jha; <i>IIT Bombay (Sep–Dec 2023): Project on p-adic L-functions.</i>	
Shubrojyoti Dhara; <i>ISI Bangalore (May–July 2023): Theory of elliptic curves.</i>	
Léonie Chipot; <i>University of Ottawa (May–June 2023): Proof writing.</i>	
Math Outreach, UofT	2018–2020
Jennifer Wang (2020): <i>reading project in number theory.</i>	
Maya Bozzo-Rey (2019): <i>project on Benford’s Law.</i>	
Anna Krokhine (2018): <i>research project on graph theory and combinatorics.</i>	

OTHER SERVICES

CMS Writing Workshop	2024
<i>I was invited to give a presentation on how to write a competitive research statement for major scholarships or fellowships (e.g., PIMS). The slides are available on my website.</i>	
Colloquium Committee, UTRGV	2024–2025
<i>I was a member of the committee deciding our colloquium speakers.</i>	
EDI Committee, UBC	2021–2022
<i>I was a member of the UBC Math Department Equity, Diversity and Inclusion Committee.</i>	
Panelist at MathPath	July 2021
<i>I was a panelist at the MathPath Summer Camp for middle school students talking about hardships faced as a female mathematician.</i>	
Outreach, UBC	2021
<i>I was an adjudicator for MURC 2021. This is an undergraduate level multi-disciplinary research conference organized at UBC every year.</i>	

REFERENCES

- Kumar Murty (murty@math.toronto.edu)**
Professor (University of Toronto)
- R. Sujatha (sujatha@math.ubc.ca)**
Professor (UBC Vancouver)
- Henri Darmon (henri.darmon@mcgill.ca)**
Professor (McGill University)
- Otmar Venjakob (venjakob@mathi.uni-heidelberg.de)**
Professor (University of Heidelberg)
- Lawrence Washington (lcw@umd.edu)**
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