

Education

2018–present	PhD Student	<i>Cornell University.</i> Advisor: Prof. Jason Manning.
2014–2018	Bachelor of Science (Research), Mathematics Major	<i>Indian Institute of Science, Bengaluru.</i>

Publications and preprints

1. A Moduli Space of Hyperbolic Structures for Big Surfaces. preprint, arXiv:2311.01551.

Talks presented

* — invited talks

Nov 20, 2023	<i>*Mapping Class Group acts continuously on the marked moduli space.</i> University at Buffalo Discourses of Graduates.
Sat 11, 2021	<i>The marked moduli space of the ladder surface does not admit any MCG-invariant metric.</i> Binghamton University Graduate Conference in Algebra and Topology.
Apr 21, 2022	<i>*Mapping Class Group acts continuously on the marked moduli space.</i> Binghamton University Geometry and Topology Seminar.
Mar 29, 2022	<i>*Mapping Class Group acts continuously on the marked moduli space.</i> Cornell Topology and Geometric Group Theory Seminar.
Sat 06, 2021	<i>A space of hyperbolic structures for the action of mapping class groups of infinite type surfaces.</i> Binghamton University Graduate Conference in Algebra and Topology.
Jul 26, 2021	<i>The Mapping Class Group acts continuously on the Moduli Space of Marked Hyperbolic Structures of the First Kind.</i> Lightning Talk at the Young Geometric Group Theory X.
Jun 21, 2021	<i>The Mapping Class Group acts continuously on the Moduli Space of Marked Hyperbolic Structures of the First Kind.</i> 2 minute talk at the CMI-HIMR Dynamics and Geometry Online Summer School.
Nov 18, 2020	<i>*Classification of Infinite Type Surfaces.</i> Virtual Geometric Structures seminar.
Nov 07, 2020	<i>Relative hyperbolic structures and Thurston's earthquake theorem.</i> Binghamton University Graduate Conference in Algebra and Topology.
Nov 07 & 14, 2019	<i>Classification of Noncompact Surfaces.</i> Working group on infinite type mapping class groups, Cornell University.
Nov 02, 2019	<i>Graphs of groups and groups acting trees: Bass-Serre theory.</i> Binghamton University Graduate Conference in Algebra and Topology.
Oct 29, 2019	<i>Arbres, amalgames and possibly SL_2.</i> Olivetti Club, Cornell University.
Jul 08, 2019	<i>The Kirby Torus Trick.</i> MSRI SGS Geometric Group Theory.
Oct 13, 2018	<i>The Goldman bracket and intersection number.</i> Binghamton University Graduate Conference in Algebra and Topology.
Apr 17, 2018	<i>Discrete Groups and Limit Sets.</i> IISc, Bengaluru Mathematics student seminar.
Feb 06, 2018	<i>Packing Polynomials and the Fueter-Polya theorem.</i> IISc, Bengaluru Mathematics student seminar.

- Jul 19, 2017 *Pontryagin framed manifolds and homotopy classes of smooth maps.* HU Berlin summer semester seminar in differential topology.
- Jul 05, 2016 *Scaling of Growth Factor in Gaussian Elimination.* ICTS, Bengaluru.

Conferences and Programmes attended

- Nov 11–Nov 12, 2023 *Binghamton University Graduate Combinatorics, Algebra, and Topology Conference* at Binghamton University, NY.
- Mar 03–Mar 06, 2023 *Huge Groups* at Université de Montréal, Canada.
- Feb 13–Feb 17, 2023 *Young Geometric Group Theory XI* at University of Münster, Germany.
- May 05–May 07, 2023 *Cornell Topology Festival* at Cornell University, Ithaca, NY.
- Nov 06–Nov 14, 2021 *Binghamton University Graduate Conference in Algebra and Topology* at Binghamton University, NY.
- Jul 26–Jul 30, 2021 *Young Geometric Group Theory X* Online hosted at Newcastle University, UK.
- Jul 05–Jul 09, 2021 *Artin Groups, CAT(0) geometry and related topics: A conference in honor of RUTH CHARNEY* Online hosted at Ohio State University, Columbus, OH.
- Jun 21–Jul 02, 2021 *CMI-HIMR Dynamics and Geometry Online Summer School* Online hosted at University of Bristol, UK.
- May 20–May 21, 2021 *Cornell Topology Festival* Online at Cornell University, Ithaca, NY.
- Nov 07–Nov 15, 2020 *Binghamton University Graduate Conference in Algebra and Topology* Online.
- Jul 20–Jul 31, 2020 *Geometric Group Theory Without Boundaries* Online.
- Jul 06–Jul 10, 2020 *Topology Students Workshop* Online.
- Nov 02–Nov 03, 2019 *Binghamton University Graduate Conference in Algebra and Topology* at Binghamton University, NY.
- Oct 12–Oct 13, 2019 *AMS Fall Eastern Sectional Meeting* at Binghamton University, NY.
- Jul 01–Jul 12, 2019 *MSRI Summer Graduate School on Geometric Group Theory* at CMO, Oaxaca, Mexico.
- May 10–May 12, 2019 *Cornell Topology Festival* at Cornell University, Ithaca, NY.
- Nov 10–Nov 11, 2018 *Upstate New York Topology Seminar* at SUNY at Albany, NY.
- Oct 13–Oct 14, 2018 *Binghamton University Graduate Conference in Algebra and Topology* at Binghamton University, NY.
- Jun 25–Jul 14, 2018 *AIS Basic Algebraic Geometry* at the Indian Institute of Science, Education and Research, Pune.
- Nov 06–Nov 24, 2017 *Geometry, Groups and Dynamics* at the International Centre for Theoretical Sciences, Bengaluru.
- May 23–Jun 04, 2016 *Dynamics of Complex Systems* at the International Centre for Theoretical Sciences, Bengaluru.
- Summers 2012–2014 *International Mathematical Olympiad Training Camp* at the Homi Bhabha Centre for Science Education, Mumbai.

Teaching

2023 Fall	grader	MATH 4220/5220: Applied Complex Analysis
2023 Spring	recitation TA	MATH 1920: Multivariable Calculus for Engineers
2022 Spring	instructor of record	MATH 1120: Calculus II
2021 Fall	grader	MATH 6520: Differentiable Manifolds
2021 Spring	recitation TA	MATH 1920: Multivariable Calculus for Engineers
2020 Fall	recitation TA	MATH 2930: Differential Equations for Engineers
2020 Spring	administrative assistant	MATH 1110/1120: Calculus I and II
2019 Fall	grader	MATH 4530: Introduction to Topology
2019 Spring	recitation TA	MATH 1920: Multivariable Calculus for Engineers
2018 Fall	recitation TA	MATH 1920: Multivariable Calculus for Engineers

Directed Reading Program projects mentored

2023 Fall	Charlotte Aspinwall	Indra's Pearls, auth. David Mumford et. al.
2020 Summer	Conan Gillis	Geometric Group Theory, auth. Clara Löh
2020 Spring	Juan Cancel	Hyperbolic Geometry, auth. James W. Anderson

Professional Activities

Mar 2021	Grader for Indian National Mathematical Olympiad 2021.
Aug 2020	Teaching assistant for Cornell Mathematics Department TA training course 2020.
Fall 2019	Organiser, 'Olivetti Club' graduate student colloquium, Cornell University.
Spring 2019	Organiser, 'What is ...?' Seminar, Cornell University.
May 2016	Academic Resource Person at India International Mathematical Olympiad Training Camp (IMOTC) 2016, HBCSE, Mumbai.
Jul 2015	Academic Resource Person (theory questions grader) at the International Physics Olympiad 2015, Mumbai, India.
Dec 2014, 2015	Grader for Regional Mathematical Olympiad (Maharashtra region).

Awards and Scholarships

2017	Working Internships in Science and Engineering (WISE) Scholarship by the German Academic Exchange (DAAD) to visit HU Berlin.
2016	S.N. Bhatt Memorial Excellence Fellowship to visit ICTS, Bengaluru.
2014	Bronze medal at the International Mathematical Olympiad (IMO) 2014, Cape Town.
2014	All India Rank 228 in the IIT-JEE.
2013–2018	Kishore Vaigyanik Protsahana Yojana (KVPY) Fellow. All India Rank 1 in SA Stream 2012.
2012	Ranked 1 in the Indian National Mathematical Olympiad.
2011	Gold medal at the International Junior Science Olympiad (IJSO) 2011, Durban.

2010–2013 National Talent Search Examination (NTSE) Scholar.

Other Activities

2014–2018 Part of Samasya, a mathematical problem-solving club in IISc.
 Aug 2016–Jan 2017 Core team member of Pravega '17, the annual science, tech and cultural fest of IISc UG. Handled all the logistics of the fest.
 2015–2016 Organised and managed mathematical events at Pravega, the annual fest of IISc UG.
 Mar 2016 Member of the winning undergraduate team at the annual inter-departmental volleyball tournament.
 Aug–Nov 2014 Member of team Notebook Drive IISc, a team that organises teaching sessions for underprivileged students in local schools. Taught at elementary computer training sessions organised by NBD.

Undergraduate Supervised Reading

Aug 2017–Apr 2018 Bachelor Project.
 Supervisor: Prof. Kaushal Verma, IISc Bengaluru.
 Topic: *Conformal Densities on Limit Sets*.
 May–Jul 2017 DAAD WISE Scholar at the Humboldt University of Berlin.
 Supervisor: Prof. Dr. Klaus Mohnke, HU Berlin.
 Topic: *Differential Topology*.
 May–Jul 2016 S.N. Bhatt Fellow at the International Centre for Theoretical Sciences, Bengaluru.
 Supervisor: Dr. Sivaram Ambikasaran, ICTS Bengaluru.
 Topic: *Numerical Linear Algebra*, specifically the Scaling of the Growth Factor in Gaussian Elimination Algorithms.

Languages

Human English (fluent), Marathi (native/fluent), Hindi (conversational)
 Computer \LaTeX , C, C++, Python, MATLAB