Devesh Rajpal

Curriculum Vitae

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Education

2021-2023	**Masters in Mathematics**, *Chennai Mathematical Institute, Chennai, India*, (Ongoing). Thesis title : Mean Curvature Flow
2020 - 2021	**Masters 2 in Mathématiques fondamentales**, *Sorbonne Université, Paris, France*. Thesis title: Ricci flow on Surfaces and Cross Curvature Flow
2017–2020	**B.Sc.(Hons) in Mathematics and Physics**, *Chennai Mathematical Institute, Chennai, Tamil Nadu, India*.
2015–2017	**Higher Secondary Education**, *Dronacharya Public School, Raipur, Chhattisgarh, India*.

Reading Projects

Summer 2022	Reading Project on Ricci flow under Prof. Ben Andrews, ANU.
	• We covered basics of Ricci flow and Hamilton's paper *Three-manifolds with positive Ricci curvature*
Summer 2020	Research Project on Spectral Geometry under Prof. Sugata Mondal, TIFR.
	• We covered parts of the paper *Berger's Isometric problem and minimal immersion of surfaces* by N. Nadirashvilli
Summer 2019	Reading Project on Riemannian Geometry under Prof. Harish Seshadri, IISc. Topics covered :
	• Riemannian Manifolds
	• Geodesics and curvature
	• Curvature - Topology theorems
Summer 2018	Reading Project on Special Relativity under Prof. Alok Laddha, CMI. Topics covered :
	• Principles of Special Relativity
	• Relativistic Mechanics
	• Geodesics and Schwarzchild Geometry

Talks and Presentations

Fall 2022	Mean Curvature Flow of Hypersurfaces, CMI.
Spring 2021	Ricci flow on Surfaces and Cross Curvature Flow, Sorbonne Université.
Fall 2019	Basics of Homological Algebra for the course Commutative Algebra, CMI.
Fall 2018	An economic analogy to thermodynamics for the course Thermal Physics, CMI.
Spring 2018	Bohlin Transformations for the course Classical Mechanics 2, CMI.

Teaching Duties

Fall 2022	Teaching assistant for course B.Sc.(Hons) Analysis 1

Lectures and Workshops attended

Nov 2019	"Curvature, torsion, and the quadrilateral gaps" by Nitin Nitsure, CMI.
July 2019	Advanced Instructional Schools on Riemannian Geometry, IISc.

Scholarships

2020 - 2021	PGSM Masters Scholarship
2017 - 2020	CMI Institutional Fee Waiver
2017 - 2020	CMI Scholarship

Other Achievements

1. Third rank in Regional Mathematics Olympiad 2015.
2. Qualified JEE Mains and Advanced.

Extracurriculars

1. Class representative for the academic term 2018-2019.
2. Physics Head of STEMS 2019, 2020, an annual math contest organized by CMI students.
3. Coordinator for Tessellate 2019, 2020, the annual CMI fest.
4. Team captain in the Intra college Volleyball tournament, Fall 2022.

Skills

Programming Languages	Haskell, Python
Tools	LaTeX
Languages	Hindi (native), English (fluent), French (basic)