Ravitheja Vangala

Curriculum Vitae

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Personal Details

First Name:	Ravitheja
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Current Position

I'm currently a Post Doctoral fellow in Department of Mathematics and Statistics at IIT Kanpur, India.

Education

2014–2019 **Ph.D. in Mathematics**, *Tata Institute of Fundamental Research*, Mumbai, India

2012–2014 **MSc. in Mathematics**, *Chennai Mathematical Institute*, Chennai, India

2009–2012 **B.Math (Hons.)**, *Indian Statistical Institute*, Bangalore, India

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Ph.D. Thesis

Title The Monomial lattice and p-adic L-functions.

Advisor Prof. Eknath Ghate

Submitted on August 7, 2019, and defended on November 6, 2019.

Conferences/Schools/Workshops

2022 **Elliptic curves and the special values of L-functions**, *08 August - 19 August*, ICTS, Bangalore, India

2021 **Elliptic curves and the special values of L-functions**, *02 August - 07 August*, ICTS, Bangalore, India

2021 **Spring School towards a mod p-Langlands correspondence**, *26 April - 30 April*, University of Duisburg, Essen (online), Germany

2020 **International Colloquium on Arithmetic Geometry**, *6 January - 11 January*, TIFR, Mumbai, India

2019 **NCMW - Modular Forms and Galois Representations**, *11 December - 17 December*, IISER, Tirupati, India

2019 **Perfectoid spaces**, *09 September - 20 September*, ICTS, Bangalore, India

2019 **Iwasawa 2019**, *19 June -28 June*, University of Bordeaux, Bordeaux, France

2019	**5th Pune-Mumbai Number theory Seminar**, *15 February - 16 February*, IISER, Pune, India
2018	**ATM Workshop L-functions**, *25 June - 30 June*, Indian Institute of Technology, Mumbai, India
2018	**4th Pune-Mumbai Number theory Seminar**, *16 February - 17 February*, Indian Institute of Technology, Mumbai, India
2016	**Theorectical and Computational Aspects of the Birch and Swinnerton-Dyer conjecture**, *12 December - 22 December*, ICTS, Bangalore, India
2016	**3rd Pune-Mumbai Number theory Seminar**, *16 September - 17 September*, TIFR, Mumbai, India
2016	**A Short Course on Modular Forms**, *24 August - 03 September*, IISER, Bhopal, India
2016	**Local Cohomology**, *20 June - 2 July*, St. Joseph College, Irinjalakuda, Kerala, India
2014	**Algebraic Number Theory**, *7 July - 20 July*, Chennai Mathematical Institute, Chennai, India
2013	**Conference on Analytic theory of Automorphic forms**, *9 December - 13 December*, Institute of Mathematical Science, Chennai, India

Research Interests

Number theory. More precisely, Galois representations, p-adic L-functions and Iwasawa theory.

Publications and preprints

[1] Eknath Ghate and Ravitheja Vangala, *p-adic Rankin product L-functions*,Proceedings of Number Theory: Arithmetic, Diophantine and Transcendence, IIT Ropar, RMS Lecture Notes Series, vol. 26 (2020), 71–107.

[2] Baskar Balasubramanyam, Eknath Ghate and Ravitheja Vangala, *p-adic Asai L-functions attached to Bianchi cusp forms*, In: Modular Forms and Related Topics in Number Theory. ICNT 2018. Springer Proceedings in Mathematics & Statistics, vol. 340 (2020), 19–45.

[3] Eknath Ghate and Ravitheja Vangala, *The Monomial Lattice in Modular Symmetric Power Representations*, Algebras and Representation Theory, vol. 25 (2022), 121–185.

[4] Somnath Jha, Sudhanshu Shekhar and Ravitheja Vangala, *Iwasawa theory for Rankin-Selberg convolution at an Eisenstein prime*, http://arxiv.org/abs/2209.04482, Submitted.

[5] Ravitheja Vangala and Vivek Rai, *Reductions of Galois representations of Slope beyond 2*, (Under preparation).

Awards and Scholarships

2009-2012	**Inspire Fellowship for Undergraduate Program**
2012-2014	**Inspire Fellowship for Masters**
2013 December	**Joint CSIR-UGC NET Exam**, *with rank 005/159*
2020	**TAA – Harish Chandra Memorial Award**, *for Best thesis in Mathematics*, TIFR, Mumbai

Teaching

2022 Spring semester	Tutor for MTH102AA Course at IIT Kanpur.

2021 Fall semester	Tutor for MTH101AA Course at IIT Kanpur.
2021 Spring semester	Tutor for MTH102AA Course at IIT Kanpur.
2020 Fall semester	Tutor for MTH101AA Course at IIT Kanpur.
2019	Tutor during the workshop Modular Forms and Galois Representations at IISER, Tirupati.

Presentations/Outreach/Other Activities

2020	Gave short talk "The monomial lattice and reductions of Galois representations" in Virtual Math Fest at IMSc, Chennai.
2019	Gave talk "p-adic Rankin product L-functions" in Annual talks at TIFR, Mumbai.
2017	Participated in Mathematics Lab at Frontiers of Science, TIFR, Mumbai.
2017	I was grader for the course Algebra I offered by Prof. Eknath Ghate for the Fall Semester at TIFR.
2016	Poster presentation at the conference "Theorectical and Computational Aspects of the Birch and Swinnerton-Dyer conjecture".