

Badri Vishal Pandey

CONTACT INFORMATION

Dept. of Mathematics
University of Virginia
Charlottesville, VA 22904

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RESEARCH INTERESTS

Analytic and Algebraic Number Theory

EDUCATION

University of Virginia, Charlottesville, VA

PhD July, 2019-December, 2022.

- *Mathematics*

Thesis title: On Higher Turán Inequalities for the Plane Partitions, Ellipsoidal T -Designs, and j -Inversion

Thesis advisor: **Ono, Ken**

Marvin Rosenblum Professor of Mathematics, Department of Mathematics,
University of Virginia.

Indian Statistical Institute, Bangalore, India

M.Math July, 2017-2019.

- *Mathematics*

Indian Statistical Institute, Bangalore, India

B.Math(Hons.) July, 2014-2017.

- Major: *Mathematics*

PAPERS AND PUBLICATIONS

- Modular forms and Ellipsoidal T -designs, [The Ramanujan Journal](#)
- Inversion Formulas for the j -function Around Elliptic Points (Co-author: De Las Penas Castano A), [Archiv der Mathematik](#)
- Higher Order Turán Inequalities for the Plane Partition Function (submitted)

TALKS

- On Higher Turán Inequalities for the Plane Partitions, Ellipsoidal T -Designs, and j -Inversion
Graduate seminar, University of Virginia
May, 2022
- Inversion of the Modular j -function
NISER, Bhubneswer
May, 2022
- Ellipsoidal T -design
18th Nagoya combinatorial seminar
December 17, 2020

	<ul style="list-style-type: none"> • Lightning Rounds by graduate students, UVA Undergraduate Math Club 	March 03, 2020
TEACHING EXPERIENCE	<ul style="list-style-type: none"> • <i>Mentor for Directed Reading Program at University of Virginia,</i> • <i>Teaching Assistant for Research Experiences for Undergraduates at the University of Virginia,</i> • <i>Teaching Assistant for Research Experiences for Undergraduates at the University of Virginia,</i> • <i>Teaching Assistant for Research Experiences for Undergraduates at the University of Virginia,</i> • <i>Instructor for Math 1220, A survey of calculus 2,</i> • <i>Instructor for Math 1220, A survey of calculus 2,</i> • <i>Instructor for Math 1210, A survey of calculus 1,</i> • <i>Teaching Assistant for Math 3250, Ordinary Differential Equations,</i> • <i>Grader for Math 3310, Basic Real Analysis,</i> • <i>Teaching Assistant for Math 2310, Calculus III,</i> • <i>Grader for Math 4651, Advanced Linear Algebra,</i> 	Fall 2022 Summer 2020 Summer 2021 Summer 2022 Fall 2021 Spring 2021 Fall 2020 Spring 2020 Spring 2020 Fall 2019 Fall 2019
CONFERENCES AND WORKSHOPS	<ul style="list-style-type: none"> • <i>100 Years of Mock Theta Functions (attended virtually),</i> • <i>Virginia Mathematics Lecture: Mikhail Khovanov (Columbia)</i> • <i>Virginia Mathematics Lecture: Curtis McMullen (Harvard)</i> • <i>Virginia Mathematics Lecture: Greg Lawler (UChicago)</i> • <i>Virginia Mathematics Lecture: Peter Sarnak (IAS Princeton)</i> 	May 22-24, 2022 April 18-20, 2022 November 8-10, 2021 February 12-14, 2020 November 4-9, 2019

	<ul style="list-style-type: none"> • <i>Advanced Instructional School on Topology</i>, National Board of Higher Mathematics 	May 2018
	<ul style="list-style-type: none"> • <i>Algebraic Geometry</i>, Indian Statistical Institute 	Dec 2017
ACHIEVEMENTS AND SCHOLARSHIPS	<p><i>Among top 100</i> TIFR Graduate School Admissions Written Exam</p> <p><i>Rank 46</i> CSIR UGC National Eligibility Test</p> <p><i>Academic fellowship for excellent performance</i> BMath Third year</p> <p><i>Academic fellowship for being second rank holder</i> BMath First year</p> <p><i>Ranked 21 out of 150,000 candidates</i> Uttar Pradesh State Engineering Entrance Exam</p>	<p>2019</p> <p>2018</p> <p>2017</p> <p>2014</p> <p>2014</p>
REFEREEING	<ul style="list-style-type: none"> • <i>International Journal of Number Theory</i> • <i>Research in Number Theory</i> • <i>The Ramanujan Journal</i> 	
EXTRACURRICULAR ACTIVITIES	<ul style="list-style-type: none"> • <i>ISI intra-college Cricket tournament winner</i>, Indian Statistical Institute, Bangalore center • <i>ISI intra-college Soccer tournament winner</i>, Indian Statistical Institute, Bangalore center • <i>Sports Committee Member</i>, Indian Statistical Institute, Bangalore center • <i>Mentor of first year undergrad</i>, Indian Statistical Institute, Bangalore center 	<p>2018</p> <p>2015 & 2017</p> <p>2015</p> <p>2015</p>
TECHNICAL SKILLS	Sage(elementary), Python(elementary), Mathematica, Octave, LaTeX, C, C++, html	