

# Badri Vishal Pandey

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| CONTACT<br>INFORMATION     | Dept. of Mathematics<br>University of Virginia<br>Charlottesville, VA 22904   | (669) 226-7426<br>badrivishal9451@gmail.com<br>bp3aq@virginia.edu           |
| RESEARCH<br>INTERESTS      | Analytic and Algebraic Number Theory  |   |
| EDUCATION                  | <b>University of Virginia</b> , Charlottesville, VA<br>PhD July, 2019-Present. <ul style="list-style-type: none"><li><i>Mathematics</i></li></ul> Thesis advisor: <b>Ono, Ken</b><br>Thomas Jefferson Professor of Mathematics and Chair, Department of Mathematics,<br>University of Virginia.<br><br><b>Indian Statistical Institute</b> , Bangalore, India<br>M.Math July, 2017-2019. <ul style="list-style-type: none"><li><i>Mathematics</i></li></ul><br><b>Indian Statistical Institute</b> , Bangalore, India<br>B.Math(Hons.) July, 2014-2017. <ul style="list-style-type: none"><li>Major: <i>Mathematics</i></li></ul> |   |
| PAPERS AND<br>PUBLICATIONS | <ul style="list-style-type: none"><li>Modular forms and Ellipsoidal <math>T</math>-designs, <a href="#">The Ramanujan Journal</a></li><li>Inversion Formulas for the <math>j</math>-function Around Elliptic Points (Co-author: De Las Penas Castano A), <a href="#">Archiv der Mathematik</a></li><li>Higher Order Turán Inequalities for the Plane Partition Function (in preparation)</li></ul>  |   |
| TALKS                      | <ul style="list-style-type: none"><li>Inversion of the Modular <math>j</math>-function<br/>NISER, Bhubneswer</li><li>Ellipsoidal T-design<br/>18th Nagoya combinatorial seminar</li><li>Lightning Rounds by graduate students,<br/>UVA Undergraduate Math Club</li></ul>  | <div>May, 2022</div> <div>December 17, 2020</div> <div>March 03, 2020</div> |

TEACHING  
EXPERIENCE

- *Mentor for Directed Reading Program at University of Virginia,* Fall 2022
- *Teaching Assistant for Research Experiences for Undergraduates at the University of Virginia,* Summer 2020
- *Teaching Assistant for Research Experiences for Undergraduates at the University of Virginia,* Summer 2021
- *Teaching Assistant for Research Experiences for Undergraduates at the University of Virginia,* Summer 2022
- *Instructor for Math 1220, A survey of calculus 2,* Fall 2021
- *Instructor for Math 1220, A survey of calculus 2,* Spring 2021
- *Instructor for Math 1210, A survey of calculus 1,* Fall 2020
- *Teaching Assistant for Math 3250, Ordinary Differential Equations,* Spring 2020
- *Grader for Math 3310, Basic Real Analysis,* Spring 2020
- *Teaching Assistant for Math 2310, Calculus III,* Fall 2019
- *Grader for Math 4651, Advanced Linear Algebra,* Fall 2019

CONFERENCES  
AND WORKSHOPS

- *100 Years of Mock Theta Functions (attended virtually),* May 22-24, 2022
- *Virginia Mathematics Lecture: Mikhail Khovanov (Columbia)* April 18-20, 2022
- *Virginia Mathematics Lecture: Curtis McMullen (Harvard)* November 8-10, 2021
- *Virginia Mathematics Lecture: Greg Lawler (UChicago)* February 12-14, 2020
- *Virginia Mathematics Lecture: Peter Sarnak (IAS Princeton)* November 4-9, 2019
- *Advanced Instructional School on Topology,* May 2018  
*National Board of Higher Mathematics*
- *Algebraic Geometry,* Dec 2017  
*Indian Statistical Institute*

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