



## Gaurav P. Sawant

Assistant Professor (Contractual)

Veermata Jijabai Technological Institute, Mumbai

Contact: +91-9969921159

gpsawant@hs.vjti.ac.in

gauravsawant.math@gmail.com

Course	College/University	Year
Ph.D. (Mathematics)	The Institute of Science, Mumbai	2019–Present
BS–MS	IISER, Pune	2008–2013
HSC/+2	Ramnivas Ruia Junior College, Mumbai	2008

### SCHOLARSHIPS AND ACHIEVEMENTS

- Secured **All India Rank 1** in Joint CSIR-UGC JRF-NET [June 2017]
- Kishor Vaigyanik Protsahan Yojana (KVPY) Fellowship [2007–2013]
- National Talent Search (NTS) Scholarship [2006–2007]

### TEACHING EXPERIENCE

- Assistant Professor (Contractual) | Veermata Jijabai Technological Institute** [August 2024 – Present]
  - Applied Mathematics - I (Computer Engineering, Electronics, Information Technology)
- Assistant Professor (Clock-Hour Basis) | The Institute of Science, Mumbai** [August 2020 – April 2024]
  - Offline Courses: Measure Theory and Integration (Spring 2024), Functional Analysis (Fall 2023, Fall 2022)
  - Online Courses: Topology (Summer 2022), Differential Geometry (Fall 2021, Fall 2020), Analysis II (Summer 2021), Complex Analysis (Spring 2021)

### SKILLS & INTERESTS

- Research Area:** Ergodic Theory, Dynamical Systems
- Topics of Interest:** Algebra, Analysis, Differential Equations, Geometry, Number Theory, Topology
- Tools:**  $\LaTeX$ , Scilab, Microsoft Office

### PUBLICATIONS AND PREPRINTS

- Sawant, G. (2023). Weighted badly approximable complex vectors and bounded orbits of certain diagonalizable flows. *International Journal of Number Theory*, **19**(8) 1977–1993. <https://doi.org/10.1142/s1793042123500951>
- Sawant, G. Hyperplane absolute winning property of bounded orbits under diagonalizable flows on  $SL_3(\mathbb{C})/SL_3(\mathcal{O}_{\mathbb{K}})$ . Preprint: <https://arxiv.org/abs/2310.16671v4>
- Sawant, G. A geometric proof of Dirichlet’s Theorem. In Preparation.

### PROJECTS

- MATH 447 | Probability | Binghamton University, State University of New York** [October 2017 – May 2018]
  - Designed the lectures and WebWorks exercise modules for the entire course

### SELECT CONFERENCES AND WORKSHOPS

- International Colloquium on Randomness, Geometry, and Dynamics; IISER, Pune [January 2024]
- Ergodic Theory and Dynamical Systems (Hybrid); ICTS, Bangalore [December 2022]
- Probabilistic Methods in Negative Curvature (Online); ICTS, Bangalore [March 2021]
- Program in Smooth and Homogeneous Dynamics; ICTS, Bangalore [September 2019]
- Discussion Meeting on Ergodic Geometry 2019; TIFR, Mumbai [March 2019]
- Workshop on High Performance Scientific Computing; IISER, Thiruvananthapuram [June 2016]
- ATM Workshop in Analysis and Geometry; TIFR-CAM, Bangalore [January 2014]
- Advanced Instructional School in Analysis and Geometry; TIFR-CAM, Bangalore [July 2013]
- International Conference on Conservation Laws and Applications; TIFR-CAM, Bangalore [July 2013]
- Advanced Instructional School in Partial Differential Equations; TIFR-CAM, Bangalore [December 2012]
- Mathematical Panorama Lectures and Workshop - “Eigenvalues of Operators with Gaps and Applications to the Dirac Operator”; TIFR-CAM, Bangalore [October 2012]
- NPDE-TCA Instructional School in Differential Equations; IMA, Bhubaneswar [May 2012]

### EXTRACURRICULAR ACTIVITIES

- Sports: Swimming and Platform Diving; Chess
- Music: Hindustani Classical (Vocals and Harmonium)