

Dr Priyabrata Mandal

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Employment History

- August 2025 – Present **Assistant Professor**
Department of Mathematics, Bioinformatics and Computer Applications
Maulana Azad National Institute of Technology Bhopal
Madhya Pradesh, India.
- May 2025 – July 2025 **Assistant Professor**
Department of Mathematics, SRM University-AP
Andhra Pradesh, India.
- June 2023 – April 2025 **Assistant Professor**
Department of Mathematics
Manipal Institute of Technology, Manipal Academy of Higher Education
Manipal, India.

Education

- Dec 2022–June 2023 **Inst. Post Doctoral Fellow, IIT Bombay**
- Dec 2016 – Feb 2023 **Ph.D., IIT Bombay Mathematics.**
Thesis title: *Totally Positive Field Extensions and Pythagorean Closures of Formally Real Fields*
- 2014 – 2016 **M.Sc. Mathematics, IIT Kanpur**
CGPA: 8.2
- 2011 – 2014 **B.Sc.(Hons) Mathematics, Jadavpur University**
Percentage: 77%

Research Publications

Published Journal Articles

1. P. Mandal, R. Preeti, and A. Soman, "Totally positive field extensions and the Pythagorean index," **Journal of Algebra and Its Applications**, 2024, 23(2), p. 2450034. DOI: <https://doi.org/10.1142/S0219498824500348>
2. P. Mandal and S. A. Sheikh, "An algebraic approach to the Fundamental Theorem of Algebra." **Rend. Circ. Mat. Palermo, II. Ser** 73, 3211–3215 (2024). DOI: <https://doi.org/10.1007/s12215-024-01093-5>
3. P. Mandal, "On the non-reality of totally positive fields," **International Journal of Mathematics and Computer Science**, 2025, 20(1), pp. 183–185. DOI: <https://doi.org/10.69793/ijmcs/01.2025/mandal>
4. S. A. Sheikh and P. Mandal, "On number of ordered pair of positive integers with given least common multiple," **Results in Nonlinear Analysis**, 2024, 7(3), pp. 209–216. DOI: <https://doi.org/10.31838/rna/2024.07.03.016>
5. P. Mandal, "Norm principles for $go(q)$ and $spin(q)$," **Global and Stochastic Analysis**, vol. 11, no. 3, pp. 43–49, May 2024.

Submitted Research Articles

1. P. Mandal and A. Soman, "Weak isotropy of central simple algebras with orthogonal involutions over totally positive field extensions", 2025. **(arXiv preprint)**. DOI: <https://doi.org/10.48550/arXiv.2503.03366>
2. P. Mandal, "On certain diophantine equations involving lucas numbers," 2024. **(arXiv preprint)**. DOI: <https://doi.org/10.48550/arXiv.2409.10152>
3. S. Kumar and P. Mandal, "Divisibility Relations Between Ring Homomorphisms and Surjective Group Homomorphisms in Finite Cyclic Structures", 2024. **(arXiv preprint)**. DOI: <https://doi.org/10.48550/arXiv.2502.14266>

Subjects Taught

Title of the Course taught	Year	U.G. / P.G.	Institution
Real Analysis	2025	UG	MIT Manipal
Applied Linear Algebra	2025	PG	MIT Manipal
Real Analysis	2024	PG	MIT Manipal
Mathematics-III	2024	UG	Department of Atomic and Molecular Physics, MAHE
Applied Mathematics Lab-II	2024	UG	Department of Atomic and Molecular Physics, MAHE
Mathematics-II	2024	UG	Department of Atomic and Molecular Physics, MAHE
Mathematics-IV	2024	UG	Department of Atomic and Molecular Physics, MAHE
Mathematical Foundations for Data Science – III	2023	UG	MIT Manipal
Engineering Mathematics-I	2023	UG	MIT Manipal
Mathematical Analysis	2023	UG	MIT Manipal

Workshops/FDP/Invited Talks

Invited Talks



Invited as a Resource Person for "National Workshop on Number Theory," organized by the Department of Mathematics, Central University of Kerala (02/01/2025 - 03/01/2025)

Workshops/FDP/Invited Talks (continued)

- Faculty Development Program
- "Effective Teaching," organized by The Office of Faculty Development and Welfare, MIT Manipal (04/07/2024 - 06/07/2024), Physical Mode.
 - "Quantum Technologies," organized by C-DAC Bangalore and the Department of CSE, MIT Manipal (12/02/2024 - 16/02/2024), Physical Mode.
 - "Deep Dive into Quantum Computing and Quantum Communication," organized by the Department of CSE, MIT Manipal (09/09/2024 - 13/09/2024), Physical Mode.
- Workshops
- "Generative AI for Educators in Higher Education," organized by the Department of CSE, MIT Manipal (02/07/2024), Physical Mode.
 - "Fundamentals in Teaching-Learning, Academic Leadership and Research," organized by CCEID, MAHE (29/01/2024 - 31/01/2024), Virtual Mode.

Skills

- Coding
- Data Science, C Programming, MatLab, LaTeX.
- Languages
- Strong reading, writing and speaking competencies for English, Hindi and Bengali.
- Misc.
- Academic research, teaching, training, consultation, LaTeX typesetting and publishing.

Miscellaneous Experience

Awards and Achievements

- 2018-19
- **First position** in *Jugalbandi* singing, PG CULT 2018-19, IIT Bombay
- 2019
- Completed 24 km individual run in *Runathon* 2019, IIT Bombay
- 2019-21
- **Department Research Scholar Representative** in the Department of Mathematics at IIT Bombay.

References

- 1 Dr. Preeti Raman
Associate Professor
Department of Mathematics
Indian Institute of Technology Bombay
preeti@math.iitb.ac.in
- 2 Dr. Abhay Soman
Assistant Professor
School of Mathematics and Statistics
University of Hyderabad
abhaysoman@uohyd.ac.in