

Renu Shekhawat

Stat-Math Unit, Indian Statistical Institute, 8th Mile, Mysore Road, RVCE Post, Bengaluru - 560 059
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Education

Indian Statistical Institute, Bangalore Centre

Philosophiae Doctorate in Mathematics
Supervisor : Dr. Soumyashant Nayak

Bengaluru, India
Jul 2019-present

University of Rajasthan

Master of Mathematics

Jaipur, India
Aug 2016 - Aug 2018

Sophia Girls' College

Bachelor of Mathematics

Ajmer, India
Jul 2013 - Jul 2016

Research Interests

Functional analysis, Operator algebras

Publications

- S. Nayak, R. Shekhawat; *A stronger form of Yamamoto's theorem II : Spectral operators* (2024).
(available at : <https://arxiv.org/abs/2410.16318>)
 - S. Nayak, R. Shekhawat; *On the Jordan-Chevalley-Dunford decomposition of operators in type I Murray-von Neumann algebras*
(available at <https://arxiv.org/abs/2506.17227>).
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Fellowships / Scholarships

- **Junior Reseach Fellowship** (Declined due to acceptance of the Institute fellowship at ISI)
 - University Grants Commission, Government of India. Dec 2018
 - Council of Scientific and Industrial Research, Department of Science and Technology, Government of India. Jun 2017
 - **Inspire Scholarship for Higher Education**
Department of Science and Technology, Government of India. Jul 2013 - Jul 2018
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Teaching Assistant / Grader

- Function spaces, B.math(III) - Semester I Aug 2023 - Nov 2023
Instructor : Soumyashant Nayak

- Complex Analysis, M.Math(I) - Semester II Jan 2022 - May 2022
Instructor : Ramesh Shreekantan
- Complex Analysis, B.Math(III) - Semester I Sep 2021 - Dec 2021
Instructor : Mathew Joseph

Conferences Attended

- **Young Mathematicians in Operator Algebras** Delhi, India
Indian Statistical Institute, Delhi Centre Mar 24 – 28, 2025
- **Conference on Operator Algebra and Related Topics (COART)** Mumbai, India
Indian Institute of Technology, Bombay Feb 24 – 29, 2025
- **Noncommutative Mathematics and Applications (NCMA)** Bengaluru, India
Indian Statistical Institute, Bangalore Centre Oct 24 – 26, 2024
- **Young Mathematicians in Operator Algebras** Delhi, India
Indian Statistical Institute, Delhi Centre Feb 26 – Mar 02, 2024
- **International Conference on Spectral and Approximation Theory (ICSAT)** Kochi, India
Cochin University of Science and Technology, Kerala Nov 27 – 30, 2023
- **Conference on Functional Analysis and Related Topics (CFART)** Mumbai, India
Indian Institute of Technology, Bombay Feb 21 – 25, 2023
- **IWM (Indian Women and Mathematics) Annual Conference** Pune, India
Indian Institute of Science Education and Research, Pune Dec 27 - 29, 2022
- **Indo-French Centre for Applied Mathematics (IFCAM)** Bengaluru, India
Summer School on Mathematical Aspects of Quantum Mechanics
Indian Institute of Science, Bengaluru Jun 01 – 12, 2022

Talks

- **Contributed Talks :**
 - *Convergence of the normalized power sequence for spectral operators*
COART, Indian Institute of Technology, Bombay Feb 27, 2025
 - *On Matrices over $C(X)$ for X a Stonean space*
ICSAT, Cochin University of Science and Technology, Kerala Nov 27, 2023
- **Seminar Talks :**
 - *An elementary computational approach to the Jordan-Chevalley decomposition and the Jordan canonical form.*
PDF - RS Annual Symposium, Indian Statistical Institute, Bangalore Centre Jan 31, 2025
 - *Convergence of the normalized power sequence for spectral operators*
QP - Day at ISI, Indian Statistical Institute, Bangalore Centre Jan 15, 2025