

INDRAJIT GHOSH

Stat-Math Unit, Indian Statistical Institute \diamond 8th Mile, Mysore Road \diamond RVCE Post \diamond Bangalore 560 059

rs_math1902@isibang.ac.in \diamond indrajitghosh912@gmail.com

EDUCATION

Philosophiae Doctorate in Mathematics, <i>Stat-Math Unit, Indian Statistical Institute Bangalore</i>	<i>Jul 2019 - Present</i> <i>Bangalore, India</i>
Master of Science in Pure Mathematics, <i>Department of Pure Mathematics, University of Calcutta</i>	<i>2016 - 2018</i> <i>Kolkata, India</i>
Bachelor of Science in Mathematics (Hons.), <i>Barasat Government College</i>	<i>2013 - 2016</i> <i>Barasat, India</i>

RESEARCH INTERESTS

Operator Algebras: von-Neumann Algebras, Type II_1 Factors, C^* -algebras. Operator Theory, Topology.

PUBLICATIONS

Algebraic aspects and functoriality of the set of affiliated operators *2023*
with S. Nayak

· arXiv: [arXiv:2311.16170](https://arxiv.org/abs/2311.16170)

FELLOWSHIPS AND ACHIEVEMENTS

- Selected for **NBHM JRF** fellowship, *National Board for Higher Mathematics*, Dept. Of Atomic Energy, Govt. of India, 2019, Ref No. 0203/11/2019-R&D-II/9261.
- Selected as JRF at Indian Statistical Institute, 2019
- Selected as JRF at IIT Madras, 2019
- Selected as JRF at IISER Bhopal, 2019
- Qualified **GATE** in Mathematics(MA), 2019
- Qualified Joint **CSIR-UGC NET JRF** fellowship, Dec 2018

CONTRIBUTED TALKS

International Conference on Spectral and Approximation Theory *Nov 27-30, 2023*
Cochin University of Science And Technology *Kerala, India*

- Place: Dept. of Mathematics, Cochin University of Science And Technology
- Website: <https://sites.google.com/view/icsat-23/>

PROJECTS & OTHER ACTIVITIES

Workshop on Completely Positive Maps *Jan 15 - Apr 29, 2024*
Indian Statistical Institute *Bangalore, India*

- Speaker(s): Prof. Soumyashant Nayak, Gahin Maity (JRF) and **Indrajit Ghosh** (SRF)
- Course Webpage: [link here](#)

Directed Reading Project *Jan 2021 - May 2021*
Indian Statistical Institute *Bangalore, India*

- Supervisor: Prof. Soumyashant Nayak
- Topics studied: C^* -Algebras, States and Representations, SOT and WOT on $\mathcal{B}(\mathcal{H})$, von-Neumann Algebras.

Graduate Course Work: Operator Theory
Indian Statistical Institute

Sep 2020
Bangalore, India

- Instructor: Prof. Rajaram Bhat
- Topics Studied: Locally Convex Spaces, Operators on Hilbert Spaces, Banach Algebras, Basic C^* -Algebra Theory.

CONFERENCES AND WORKSHOPS ATTENDED

International Conference on Spectral and Approximation Theory *Nov 27-30, 2023*
Cochin University of Science And Technology *Kerala, India*

- Place: Dept. of Mathematics, Cochin University of Science And Technology
- Website: <https://sites.google.com/view/icsat-23/>

Conference on Functional Analysis and Related Topics *Feb 21-25, 2023*
Indian Institute of Technology *Bombay, India*

- Place: Victor Menezes Convention Centre (VMCC), IIT Bombay
- Website: <https://sites.google.com/view/cfart-2023-iitb/>

ERGODIC THEORY AND DYNAMICAL SYSTEMS *Dec 05-16, 2022*
International Centre for Theoretical Sciences *Bangalore, India*

- Place: Ramanujan Lecture Hall (ICTS) and Online
- Website: <https://www.icts.res.in/program/ETDS2022>

Baby Steps Beyond the Horizon - school for students *Aug 29-Sep 02, 2022*
Institute of Mathematics Polish Academy of Science *Warszawa, Poland*

- Place: Online Mode
- Website: <https://www.impan.pl/en/activities/banach-center/conferences/22-babysteps>

A conference on ergodic theory and von Neumann algebra *Aug 04-06, 2022*
National Institute of Science Education and Research *Odisha, India*

- Place: Online mode
- Website: <https://www.niser.ac.in/etvna/>

IFCAM Summer School - Mathematical Aspects of Quantum Mechanics *Jun 1-12, 2022*
Indian Institute of Science *Bangalore, India*

- Place: Indian Institute of Science, Bangalore
- Website: <https://ifcam.sciencesconf.org/>

Advanced Instructional School - Advanced Linear Algebra *May 2022*
Indian Statistical Institute *Bangalore, India*

- Organisers: Prof. Jaydeb Sarkar (Indian Statistical Institute, Bangalore), Prof. Rajesh Sharma (Himachal Pradesh University)
- Website: <https://www.atmschools.org/school/2022/AIS/ala>

Conference on Quantum Probability and Infinite Dimensional Analysis *Jan 17-20, 2022*
Indian Statistical Institute *Bangalore, India*

- Local organisers: Prof. Rajaram Bhat (Indian Statistical Institute, Bangalore), Prof. Jaydeb Sarkar (Indian Statistical Institute, Bangalore)
- Website: <https://www.isibang.ac.in/~statmath/conferences/QPIDA-2022.html>

IWM Mini Course on Approximate Solutions of Operator Equations and Eigenvalue Problems *Nov 2021*

- Place: Online mode
- Organisers: [Indian Women and Mathematics](#)
- Website: [IWM-MiniCourse-2021](#)

Online Workshop on Algebraic Number Theory
Assam University

Sep 2020
Silchar, India

- Place: Online mode
- Organiser: Prof. [Samira Behera](#) (Assam University, Silchar)

TEACHING EXPERIENCE

Teaching Assistant

Indian Statistical Institute

Aug 1, 2023 - Nov 25, 2023
Bangalore, India

- Course: Analysis of Several Variables (B. Math. II)
- Instructor: Mathew Joseph

Teaching Assistant

Indian Statistical Institute

Aug 2022 - Nov 2022
Bangalore, India

- Course: Complex Analysis I (BMath III Year)
- Instructor: Mathew Joseph

Teaching Assistant

Indian Statistical Institute

Jan 2022 - May 2022
Bangalore, India

- Course: Functional Analysis I (MMath I Year)
- Instructor: Soumyashant Nayak

Teaching Assistant

Indian Statistical Institute

Sep 2021 - Jan 2021
Bangalore, India

- Course: Optimization (BMath II Year)
- Instructor: Soumyashant Nayak