# Indrajit Ghosh | Curriculum Vitae

8th Mile Mysore Road, RVCE Post - Bangalore 560 059, India 

#### Education

Stat-Math Unit, Indian Statistical Institute Bangalore

Department of Pure Mathematics, University of Calcutta

Philosophiae Doctorate in Mathematics

Master of Science in Pure Mathematics

Jul 2019 - Present

Bangalore, India

Kolkata, India

2016 - 2018

Barasat, India 2013 - 2016

**Barasat Government College** 

Bachelor of Science in Mathematics (Hons.)

## Research Interests

Operator Algebras: von Neumann Algebras, Type  $II_1$  Factors,  $C^*$ -Algebras; Operator Theory; Topology

## **Publications**

- o I. Ghosh, S. Nayak; Affiliated operators for monotone  $\sigma$ -complete  $C^*$ -algebras, pre-print, under preparation, 2025.
- o I. Ghosh, S. Nayak; Algebraic aspects and functoriality of the set of affiliated operators, International Mathematics Research Notices, Volume 2024, Issue 21, Nov 2024, Pages 13525-13562. [DOI], [arXiv:2311.16170]

# Fellowships and Achievements

- o 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**

## PDF-RS Annual Symposium 2025

Indian Statistical Institute Bangalore

Venue: Platinum Jubilee Auditoriam, ISI

O Website: Click here O Abstract: Click here Bangalore, India Jan 29, 2025

#### Workshop on Completely Positive Maps

Indian Statistical Institute Bangalore

Bangalore, India Jan 15 - Jun 04, 2024

Venue: Stat-Math Unit, ISI

O Website: Click here

# Young Mathematicians in Operator Algebras

Indian Statistical Institute Delhi

Delhi, India Feb 27, 2024

o Venue: Stat-Math Unit, ISI

• Website: https://sites.google.com/view/ymoa/home

O Abstract: Click here

## International Conference on Spectral and Approximation Theory

Cochin University of Science and Technology

Kerala, India Nov 29, 2023

Venue: Department of Mathematics, CUSAT

• Website: https://sites.google.com/view/icsat-23/

o Abstract: Click here

# **Teaching Experiences**

Indian Statistical Institute Bangalore Bangalore, India Teaching Assistant Jan 01, 2025 - Present • Course: Optimization (B. Math III) o Instructor: Soumyashant Nayak Indian Statistical Institute Bangalore Bangalore, India Teaching Assistant Jan 2024 - Apr 2024 o Course: A Course in Harmonic Analysis (B. Math III) o Instructor: Soumyashant Nayak **Indian Statistical Institute Bangalore** Bangalore, India Aug 01 - Nov 25, 2023 Teaching Assistant o Course: Analysis of Several Variables (B. Math II) o Instructor: Mathew Joseph **Indian Statistical Institute Bangalore** Bangalore, India Teaching Assistant Aug 2022 - Nov 2022 o Course: Complex Analysis I (B. Math III) Instructor: Mathew Joseph Indian Statistical Institute Bangalore Bangalore, India Teaching Assistant Jan 2022 - Apr 2022 o Course: Functional Analysis (M. Math I) o Instructor: Soumyashant Nayak Indian Statistical Institute Bangalore Bangalore, India Teaching Assistant Sep 21 - Dec 23, 2021 • Course: Optimization (B. Math II) o Instructor: Soumyashant Nayak Conferences and Workshops Attended Noncommutative Mathematics and Applications (NCMA) Bangalore, India Indian Statistical Institute Bangalore Oct 24 - 26, 2024 Venue: Stat-Math Unit, ISI • Website: https://www.isibang.ac.in/~jay/NC/NC.html Young Mathematicians in Operator Algebras Delhi, India Feb 26 - Mar 02, 2024 Indian Statistical Institute Delhi Venue: Stat-Math Unit, ISI • Website: https://sites.google.com/view/ymoa/home International Conference on Spectral and Approximation Theory Kerala, India Cochin University of Science and Technology Nov 27 - 30, 2023 Venue: Department of Mathematics, CUSAT o Website: https://sites.google.com/view/icsat-23/ Conference on Functional Analysis and Related Topics-2023 Bombay, India Feb 21 - 25, 2023 Indian Institute of Technology Bombay, India Venue: Victor Menezes Convention Centre (VMCC), IIT Bombay • Website: https://sites.google.com/view/cfart-2023-iitb/ Tomita-Takesaki Modular Theory Bangalore, India Indian Statistical Institute, Bangalore, India Jan 18 - Apr 26, 2023 o Venue: Stat-Math Unit, ISI O Website: Click here **Ergodic Theory and Dynamical Systems** Bangalore, India Dec 05 - 16, 2022 International Centre for Theoretical Sciences Venue: Ramanujan Lecture Hall (ICTS) and Online o Website: https://www.icts.res.in/program/ETDS2022 Baby Steps Beyond the Horizon Warszawa, Poland Aug 29 - Sep 02, 2022 Institute of Mathematics Polish Academy of Sciences

Venue: Online

o Website: https://www.impan.pl/en/activities/banach-center/conferences/22-babysteps

#### A Conference on Ergodic Theory and von-Neumann Algebra

National Institute of Science Education and Research

Odisha, India Aug 04 - 06, 2022

Venue: Online

o Website: https://www.niser.ac.in/etvna

#### **IFCAM** - Mathematical Aspects of Quantum Mechanics

Indian Institute of Science Bangalore

Bangalore, India

Jun 01 - 12, 2022

Venue: Math Dept., IISc

• Website: https://ifcam.sciencesconf.org/

## **Quantum Probability and Infinite Dimensional Analysis**

Indian Statistical Institute Bangalore

Bangalore, India

Jan 17 - 20, 2022

Venue: Stat-Math Unit, ISI

• Website: https://www.isibang.ac.in/ statmath/conferences/QPIDA-2022.html

## References

• Prof. Soumyashant Nayak, Assistant Professor | Office A-14, Stat-Math Unit, Indian Statistical Institute Bangalore | soumyashant@isibang.ac.com

o Prof. B.V. Rajarama Bhat, Professor | Stat-Math Unit, Indian Statistical Institute Bangalore | bvrajaramabhat@gmail.com

o Prof. Nisith Chandra Das, Associate Professor | Department Of Mathematics, Barasat Govt. College, West Bengal, India dasnisith@gmail.com

o Prof. Atasi Deb Ray, Associate Professor | Department Of Pure Mathematics, University of Calcutta | adrpm@caluniv.ac.in