

# 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](mailto:rs_math1902@isibang.ac.in)  $\diamond$  [indrajitghosh912@gmail.com](mailto:indrajitghosh912@gmail.com)

## EDUCATION

---

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

---

**(Pre-print) 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

---

**Young Mathematicians in Operator Algebras** *Feb 27, 2024*  
*Indian Statistical Institute Delhi* *Delhi, India*

- Place: Stat-Math Unit, ISI
- Website: <https://sites.google.com/view/ymoa/home>

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

- Place: Stat-Math Unit, ISI
- Website: [link here](#)

**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/>

## CONFERENCES AND WORKSHOPS ATTENDED

---

### **Young Mathematicians in Operator Algebras**

*Indian Statistical Institute, Delhi*

*Feb 26 - Mar 02, 2024*

*Delhi, India*

- Place: Stat-Math Unit, ISI Delhi
- Website: <https://sites.google.com/view/ymoa/home>

### **International Conference on Spectral and Approximation Theory**

*Cochin University of Science And Technology*

*Nov 27-30, 2023*

*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**

*Indian Institute of Technology*

*Feb 21-25, 2023*

*Bombay, India*

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

### **ERGODIC THEORY AND DYNAMICAL SYSTEMS**

*International Centre for Theoretical Sciences*

*Dec 05-16, 2022*

*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**

*Institute of Mathematics Polish Academy of Science*

*Aug 29-Sep 02, 2022*

*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**

*National Institute of Science Education and Research*

*Aug 04-06, 2022*

*Odisha, India*

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

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

*Indian Institute of Science*

*Jun 1-12, 2022*

*Bangalore, India*

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

### **Advanced Instructional School - Advanced Linear Algebra**

*Indian Statistical Institute*

*May 2022*

*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**

*Indian Statistical Institute*

*Jan 17-20, 2022*

*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