

# INDRAJIT GHOSH

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

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## EDUCATION

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<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

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

## FELLOWSHIPS AND ACHIEVEMENTS

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- 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

## PROJECTS & OTHER ACTIVITIES

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<b>Directed Reading Project</b> <i>Indian Statistical Institute</i>	<i>Jan 2021 - May 2021</i> <i>Bangalore, India</i>
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- Supervisor: Prof. Soumyashant Nayak
- Topics studied:  $C^*$ -Algebras, States and Representations, SOT and WOT on  $\mathcal{B}(\mathcal{H})$ , von-Neumann Algebras.

<b>Graduate Course Work: Operator Theory</b> <i>Indian Statistical Institute</i>	<i>Sep 2020</i> <i>Bangalore, India</i>
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- Instructor: Prof. Rajaram Bhat
- Topics Studied: Locally Convex Spaces, Operators on Hilbert Spaces, Banach Algebras, Basic  $C^*$ -Algebra Theory.

## CONFERENCES AND SCHOOLS ATTENDED

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<b>Conference on Functional Analysis and Related Topics</b> <i>Indian Institute of Technology</i>	<i>Feb 21-25, 2023</i> <i>Bombay, India</i>
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- Place: Victor Menezes Convention Centre (VMCC), IIT Bombay
- Website: <https://sites.google.com/view/cfart-2023-iitb/>

<b>ERGODIC THEORY AND DYNAMICAL SYSTEMS</b> <i>International Centre for Theoretical Sciences</i>	<i>Dec 05-16, 2022</i> <i>Bangalore, India</i>
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- 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 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