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

#### RESEARCH INTERESTS

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

#### 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.
- $\cdot$  Selected as JRF at Indian Statistical Institute, 2019
- · Selected as JRF at IIT Madras, 2019
- $\cdot$  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

## Directed Reading Project

Jan 2021 - May 2021 Bangalore, India

Indian Statistical Institute

- · 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

Sep 2020

Indian Statistical Institute

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 Kerala, India

Cochin University of Science And Technology

- · 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

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 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)

IWM Mini Course on Approximate Solutions of Operator Equations and Eigenvalue Prob-

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

Nov 2021

· Place: Online mode

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· Organisers: Indian Women and Mathematics

· Website: IWM-MiniCourse-2021

#### Online Workshop on Algebraic Number Theory

Sep 2020

Assam University

Silchar, India

· Place: Online mode

· Organiser: Prof. Samira Behera (Assam University, Silchar)

#### TEACHING EXPERIENCE

Teaching Assistant Aug 1, 2023 - Present Indian Statistical Institute Bangalore, India · Course: Analysis of Several Variables (B. Math. II) · Instructor: Mathew Joseph Teaching Assistant Aug 2022 - Nov 2022  $Indian\ Statistical\ Institute$ Bangalore, India · Course: Complex Analysis I (BMath III Year) · Instructor: Mathew Joseph Teaching Assistant Jan 2022 - May 2022 Indian Statistical Institute Bangalore, India · Course: Functional Analysis I (MMath I Year)

· Instructor: Soumyashant Nayak

Teaching Assistant Sep 2021 - Jan 2021 Indian Statistical Institute Bangalore, India

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