# Indrajit Ghosh | Curriculum Vitae

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#### **Education**

Stat-Math Unit, Indian Statistical Institute Bangalore

Philosophiae Doctorate in Mathematics

Department of Pure Mathematics, University of Calcutta

Master of Science in Pure Mathematics

Barasat Government College

Bachelor of Science in Mathematics (Hons.)

Bangalore, India

Jul 2019 – Present

Kolkata, India

2016 – 2018

Barasat, India

2013 – 2016

### **Research Interests**

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

#### **Publications**

 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

- 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.
- o 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
- o Qualified Joint CSIR-UGC NET JRF fellowship, Dec 2018

#### **Contributed Talks**

### Workshop on Completely Positive Maps

Indian Statistical Institute Bangalore

Venue: Stat-Math Unit, ISI

O Website: Click here

Bangalore, India

Jan 15 - Jun 04, 2024

Young Mathematicians in Operator Algebras

Indian Statistical Institute Delhi

Venue: Stat-Math Unit, ISI

o 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

Delhi, India

Feb 27, 2024

Venue: Department of Mathematics, CUSAT

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

o Abstract: Click here

## **Teaching Experiences**

Indian Statistical Institute Bangalore

Teaching Assistant

Bangalore, India Jan 2024 – Present

• Course: A Course in Harmonic Analysis (B. Math III)

o Instructor: Soumyashant Nayak

**Indian Statistical Institute Bangalore** 

Teaching Assistant

Bangalore, India

Aug 01 - Nov 25, 2023

o Course: Analysis of Several Variables (B. Math II)

Instructor: Mathew Joseph

Indian Statistical Institute Bangalore

Teaching Assistant

Bangalore, India

Aug 2022 - Nov 2022

• Course: Complex Analysis I (B. Math III)

Instructor: Mathew Joseph

**Indian Statistical Institute Bangalore** 

Teaching Assistant

Bangalore, India Jan 2022 - Apr 2022

o Course: Functional Analysis (M. Math I)

o Instructor: Soumyashant Nayak

**Indian Statistical Institute Bangalore** 

Teaching Assistant

Bangalore, India

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 Oct 24 - 26, 2024

Indian Statistical Institute Bangalore

Venue: Stat-Math Unit, ISI

• Website: https://www.isibang.ac.in/~jay/NC/NC.html

Young Mathematicians in Operator Algebras

Indian Statistical Institute Delhi

Delhi, India

Feb 26 - Mar 02, 2024

Venue: Stat-Math Unit, ISI

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

International Conference on Spectral and Approximation Theory

Cochin University of Science and Technology

Kerala, India Nov 27 - 30, 2023

Venue: Department of Mathematics, CUSAT

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

Conference on Functional Analysis and Related Topics-2023

Indian Institute of Technology Bombay, India

Bombay, India

Feb 21 - 25, 2023

Venue: Victor Menezes Convention Centre (VMCC), IIT Bombay

o Website: https://sites.google.com/view/cfart-2023-iitb/

Tomita-Takesaki Modular Theory

Bangalore, India Jan 18 - Apr 26, 2023

Indian Statistical Institute, Bangalore, India

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Venue: Stat-Math Unit, ISI

O Website: Click here

**Ergodic Theory and Dynamical Systems** 

International Centre for Theoretical Sciences

**Bangalore, India** *Dec 05 – 16, 2022* 

• Venue: Ramanujan Lecture Hall (ICTS) and Online

• Website: https://www.icts.res.in/program/ETDS2022

Institute of Mathematics Polish Academy of Sciences

Baby Steps Beyond the Horizon

Warszawa, Poland

Aug 29 - Sep 02, 2022

Venue: Online

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

A Conference on Ergodic Theory and von-Neumann Algebra

Odisha, India

National Institute of Science Education and Research

Aug 04 – 06, 2022

Venue: Online

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

**IFCAM** - Mathematical Aspects of Quantum Mechanics

Bangalore, India Jun 01 - 12, 2022

Indian Institute of Science Bangalore

Venue: Math Dept., IISc

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

Advanced Instructional School - Advanced Linear Algebra

**Bangalore, India** *May 09 - 28, 2022* 

Indian Statistical Institute Bangalore

Venue: Stat-Math Unit, ISI

• Website: https://www.atmschools.org/school/2022/AIS/ala

**Quantum Probability and Infinite Dimensional Analysis** 

**Bangalore, India** *Jan 17 – 20, 2022* 

Indian Statistical Institute Bangalore

Venue: Stat-Math Unit, ISI

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

**IWM Mini Course on Approximate Solutions of Operator Equations** 

India Nov 2021

Indian Women and Mathematics

• Website: https://drive.google.com/file/d/1FYd-6j\_hwOMfc2Z9NIQiv2ZqSnF859J4/view

Online Workshop on Algebraic Number Theory

Assam, India

Assam University

Sep 2020

Venue: Online

Venue: Online

#### References

- **Dr. Soumyashant Nayak**, Assistant Professor | Office A-14, Stat-Math Unit, Indian Statistical Institute Bangalore | soumyashant@isibang.ac.com
- **Dr. Nisith Chandra Das**, *Associate Professor* | Department Of Mathematics, Barasat Govt. College, West Bengal, India | dasnisith@gmail.com
- **Dr. Atasi Deb Ray**, *Associate Professor* | Department Of Pure Mathematics, University of Calcutta | adrpm@caluniv.ac.in