Indrajit Ghosh | Curriculum

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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]
- **I. Ghosh**, S. Nayak; *Affiliated operators for monotone* σ -complete C^* -algebras, pre-print, under preparation, 2025 .

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
- o Selected as JRF at IIT Madras, 2019
- o Selected as JRF at IISER Bhopal, 2019
- o 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

Website: Click hereAbstract: Click here

Bangalore, India

Jan 29, 2025

Workshop on Completely Positive Maps

Indian Statistical Institute Bangalore

Venue: Stat-Math Unit, ISI

Website: Click here

Young Mathematicians in Operator Algebras

Indian Statistical Institute Delhi

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

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

• Course: Optimization (B. Math III)

o Instructor: Soumyashant Nayak

Indian Statistical Institute Bangalore

Teaching Assistant

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

o Instructor: Soumyashant Nayak

Indian Statistical Institute Bangalore

Teaching Assistant

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

o Instructor: Mathew Joseph

Indian Statistical Institute Bangalore

Teaching Assistant

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

Instructor: Mathew Joseph

Indian Statistical Institute Bangalore

Teaching Assistant

Course: Functional Analysis (M. Math I)

o Instructor: Soumyashant Nayak

Indian Statistical Institute Bangalore

Teaching Assistant

Course: Optimization (B. Math II)

o Instructor: Soumyashant Nayak

Bangalore, India

Jan 15 - Jun 04, 2024

Delhi. India

Feb 27, 2024

Kerala, India

Nov 29, 2023

Bangalore, India Jan 01 - Apr 15, 2025

Bangalore, India

Jan 2024 - Apr 2024

Bangalore, India

Aug 01 - Nov 25, 2023

Bangalore, India Aug 2022 - Nov 2022

Bangalore, India

Jan 2022 - Apr 2022

Bangalore, India

Sep 21 - Dec 23, 2021

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 Indian Statistical Institute Delhi 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 Kerala, India Cochin University of Science and Technology 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 Bombay, India Indian Institute of Technology 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 Indian Statistical Institute, Bangalore, India Jan 18 - Apr 26, 2023 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 • Website: https://www.icts.res.in/program/ETDS2022 Warszawa, Poland Baby Steps Beyond the Horizon Institute of Mathematics Polish Academy of Sciences 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 Indian Institute of Science Bangalore Jun 01 - 12, 2022 Venue: Math Dept., IISc • Website: https://ifcam.sciencesconf.org/ Quantum Probability and Infinite Dimensional Analysis Bangalore, India Indian Statistical Institute Bangalore 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
- **Prof. B.V. Rajarama Bhat**, *Professor* | Stat-Math Unit, Indian Statistical Institute Bangalore | bvrajaramabhat@gmail.com
- **Prof. Nisith Chandra Das**, *Associate Professor* | Department Of Mathematics, Barasat Govt. College, West Bengal, India | dasnisith@gmail.com
- **Prof. Atasi Deb Ray**, *Associate Professor* | Department Of Pure Mathematics, University of Calcutta | adrpm@caluniv.ac.in