# Jiten Kumbhakar

💄 Research Scholar

ĭ jk17ip021@iiserkol.ac.in

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### Education

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Integrated Ph.D., IISER Kolkata (2017 - current)

- Research Area: Control of Partial Differential Equations
- Supervisor: Dr. Shirshendu Chowdhury
- Course CGPA: 8.68
- B.Sc. in Mathematics, Jagannath Kishore College, Purulia (2014 2017)
  - Percentage: 88.5%

Higher Secondary (H.S.) in Science, Purulia M.M. High School (2012 - 2014)

• **Percentage:** 81.0%

Class 10th, Ladhurka High School (H.S.), Purulia (2012)

• **Percentage:** 80.7%

### **E** List of Publications

 Kuntal Bhandari, Jiten Kumbhakar, and Subrata Majumdar. Local null-controllability of a twoparabolic nonlinear system with coupled boundary conditions by a Neumann control. Evol. Equ. Control Theory, 13(2):587–615, 2024.

Link. https://doi.org/10.3934/eect.2023059.

# **E** List of PrePrints

 Kuntal Bhandari, Shirshendu Chowdhury, Rajib Dutta, and Jiten Kumbhakar. Boundary nullcontrollability of 1d linearized compressible Navier-Stokes system by one control force, 2024.
 Status: Submitted.

Link: .

2. Jiten Kumbhakar. Null controllability of one-dimensional barotropic and non-barotropic linearized compressible Navier-Stokes system using one boundary control, 2024.

Status: Revised version submitted.

Link: https://arxiv.org/abs/2301.04080.

## **PhD** Thesis

■ Jiten Kumbhakar. Boundary controllability of linearized compressible Navier-Stokes system and related equations, 2024.

Link.

### **Q** Awards and Achievements

- **Q** Prime Minister Research Fellow (PMRF) at IISER Kolkata (2020 2023)
- **Q** CSIR-JRF (December, 2018)
  - Rank: 98

### **Q** JAM (2017)

• Rank: 38 (Mathematics), 72 (Statistics)

### **Q** Gold Medalist (2017)

- Shakti Sadhan Basu Memorial Medal and prize.
- Manindralal Banerjee Memorial Prize.

### Workshops/ Conferences

### Recent Advances on Control Theory of PDE Systems at ICTS Bangalore

- **Type:** International Conference
- **Date:** February 12 February 23, 2024

### Control Theory Meets the Theory of Homogenization at IIT Bombay

- Type: Discussion Meeting
- Date: February 28 March 04, 2023

### Convex Integration Solutions for the Transport Equation at IISER Kolkata

- Type: Lecture Series
- Speaker: Dr. Ujjwal Koley, TIFR CAM
- Date: November 08 November 18, 2021

### Short Course in Calculus of Variations at IISER Kolkata

- Type: Lecture Series
- Speaker: Professor Bernard Dacorogna, EPFL, Switzerland
- **Date:** January 28 February 01, 2019

### **\_** Seminar

# ■ Null and Approximate Controllability of Heat Equation in One Dimension Using the Method of Flatness

- Type: Weekly Research Seminar
- Organizer: Mythily Ramaswamy, TIFR-ICTS Bangalore
- Date: August 05, 2021

### La Teaching Assistants at IISER Kolkata

### Mathematics I (MA1101)

- Course Instructor: Dr. Saugata Bandyopadhyay
- Semester: Autumn 2022
- Mathematics II (MA1201)
  - Course Instructor: Dr. Anirban Banerjee
  - Semester: Spring 2022

### Mathematics I (MA1101)

- Course Instructor: Dr. Saugata Bandyopadhyay
- Semester: Autumn 2021
- Mathematics II (MA1201)

- Course Instructor: Dr. Shirshendu Chowdhury
- Semester: Spring 2021
- Analysis II (MA2201)
  - Course Instructor: Dr. Sushil Gorai
  - Semester: Spring 2021
- Mathematics II (MA1201)
  - Course Instructor: Dr. Shirshendu Chowdhury
  - Semester: Spring 2020

Analysis III (MA3101)

- Course Instructor: Dr. Shirshendu Chowdhury
- Semester: Autumn 2019

### La Teaching Assistants (Workshops)

### Control Theory for Partial Differential Equations at IISER Kolkata

- Type: Workshop
- Date: December 04 December 16, 2023

### Control Theory for Differential Equations at IISER Kolkata

- Type: Workshop
- Date: November 28 December 10, 2022

### **D** NPTEL Live Sessions

### Introductory Course In Real Analysis (noc22-ma79)

- Course Instructor: Prof. P. D. Srivastava, IIT Kharagpur
- Date: July October, 2022
- Basic Linear Algebra (noc23-ma07)
  - Course Instructor: Prof. I. K. Rana, IIT Bombay
  - Date: February April, 2023

### **A≭** Languages

Bengali (Native), Hindi, English

### References

### Jiten Kumbhakar

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MathSciNet: text