

# Jiten Kumbhakar

## Curriculum Vitae

Purulia, West Bengal, India, 723148

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✉ jk17ip021@iiserkol.ac.in

### Education

- July 2017- **Integrated Ph.D.**, PMRF Fellow, Indian Institute of Science Education and  
Current Research (IISER), Kolkata, West Bengal, India
- **Research Area:** Control of PDEs.
  - **Supervisor:** Dr. Shirshendu Chowdhury
- July 2014- **B.Sc. in Mathematics**, Percentage: 88.9%, Jagannath Kishore College, Pu-  
May 2017 rulia, West Bengal, India
- 2012-2014 **Higher Secondary in Science**, Percentage: 81%, Purulia M.M. High School,  
Purulia, West Bengal, India
- 2012 **Class 10th**, Percentage: 80.7%, Ladhurka High School (H.S), Purulia, West  
Bengal, India

### Honors & Awards

**PMRF**, Prime Minister Research Fellow at IISER Kolkata

**Gold Medalist**, Shakti Sadhan Basu Memorial Medal and prize  
Awarded for highest marks in B.Sc among all students in Purulia District

**Gold Medalist**, Manindralal Banerjee Memorial Prize

Awarded for highest marks in B.Sc in Arts, Science and Commerce among all students  
in Purulia District

**CSIR JRF**, Got 98th rank in the NET exam conducted by CSIR

**JAM**, Got 38th rank in the JAM exam in mathematics and got 72th rank in  
statistics

### Course Projects

- **Master's Thesis**

*Project Title: Controllability of ODE, Heat Equation and Navier-Stokes Equations.* The project is mainly based on proving null controllability for ODE and Heat equation and lack of null controllability but positive approximate controllability for linearized compressible Navier-Stokes equations in one dimension using method of moments.

### Teaching Assistant

Autumn **Mathematics II**, 1st year undergraduate, IISER Kolkata  
2021

- **Instructor:** Dr. Shirshendu Chowdhury

- Spring 2021 **Analysis II**, 2nd year undergraduate, IISER Kolkata  
● **Instructor:** Dr. Sushil Gorai
- Spring 2020 **Mathematics II**, 1st year undergraduate, IISER Kolkata  
● **Instructor:** Dr. Shirshendu Chowdhury
- Autumn 2019 **Analysis III**, 3rd year undergraduate, IISER Kolkata  
● **Instructor:** Dr. Shirshendu Chowdhury

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## Reading Courses

### Control Theory

- Main Book: Control and Nonlinearity by Jean-Michel Coron

### Functional Analysis and Partial Differential Equations

- Book 1: Partial Differential Equations by Lawrence C. Evans.
- Book 2: Functional Analysis, Sobolev Spaces and Partial Differential Equations by Haim Brezis

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## Workshops

- Speaker: Professor Bernard Dacorogna, EPFL, Switzerland  
Title: Short Course in Calculus of Variations  
Date: January 28- February 01, 2019

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## Seminars

- Null and Approximate controllability of Heat equation in one dimension using the method of Flatness  
Weekly Research Seminar, Organized by Mythily Ramaswamy, TIFR-ICTS Bangalore  
Date: August 05, 2021
- Weierstrass Approximation Theorem and its applications, IISER Kolkata  
Date: August 31, 2018

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## References

- **Supervisor: Dr. Shirshendu Chowdhury**  
Department of Mathematics  
Faculty  
IISER Kolkata  
West Bengal, India  
shirshendu@iiserkol.ac.in

**Declaration:** I hereby declare that all the statements made herein are true to my best of knowledge and belief.

Place: Kolkata

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