



**Kshitij Sinha**  
Mathematics  
Indian Institute of Technology Bombay

23D0781  
Ph.D  
Male

Examination	University	Institute	Year	CPI/%
Ph.D	IIT Bombay	IIT Bombay	2023-Present	9.48
M.Sc.	IIT Kanpur	IIT Kanpur	2020-22	7.50
B.Sc.	BHU	BHU, Varanasi	2017-20	8.26
Intermediate/+2	CBSE	Udai Pratap Public School	2015-17	91.80
Matriculation	ICSE	St.John's School	2015	82.80

#### EXAMS QUALIFIED

- BHU-UET (2017)
- IIT JAM (All India rank of 77) (2020)
- GATE (All India rank of 30) (2023)
- NBHM (2023)
- CSIR-NET(All India rank of 89) (2023)

#### PUBLICATIONS

- Kshitij Sinha. Quantitative periodic homogenization of parabolic equations with large drift and potential (arXiv.2509.22003)

#### SEMINARS, CONFERENCES ATTENDED

- NCMW - A Contemporary Course on Elliptic Partial Differential Equations (20 May '24 - 01 Jun'24)
  - Organized by Professor Ali Hyder(TIFR-CAM) and Professor Debabrata Karmakar(TIFR-CAM) at TIFR - Center for Applicable Mathematics(CAM), Bengaluru
- Quantitative theory of Homogenization (17 Feb '25 - 22 Feb'25)
  - Organized by Professor Harsha Hutridurga(IIT-B) and Professor S. Sivaji Ganesh(IIT-B) at IIT Bombay
- Stochastic Processes and Related Topics 2025 (13 Sep '25 - 15 Sep'25)
  - Organized by Professor Chetan D. Pahlajani(IIT-Gandhinagar) at IIT Gandhinagar

#### TALKS GIVEN

- Quantitative theory of Homogenization (17 Feb '25 - 22 Feb'25)
  - Doctoral Course(5:30 hours) on the Quantitative aspects of Homogenization of Elliptic Partial Differential equations in periodic settings
- Stochastic Processes and Related Topics 2025 (13 Sep '25 - 15 Sep'25)
  - Talk on Quantitative periodic homogenization of parabolic equations with large drift and potential

#### TEACHING EXPERIENCE

- Teaching Assistant for the course MA515 : Partial Differential Equations, Tutorials and Grading (Aug'24-Dec'24 & Aug'25 - Dec'25)
- Teaching Assistant for the course SI416 : Optimization, Tutorials and Grading (Jan'25-Apr'25 & Jan'26-Apr'26)

#### TECHNICAL SKILLS

- Programming & Scripting Languages: C, C++
- Tools & Libraries: MATLAB, L<sup>A</sup>T<sub>E</sub>X

#### EXTRA-CURRICULARS

- Cultural Secretary at Hostel 14, IIT Bombay (Aug'25-Aug'26)
- Ram-Leela played the roles of Kumbhakaran and Banasur in the Ram-Leela
- Anime suggestions: Assassination Classroom, Demon Slayer

#### LANGUAGES

- Hindi Mother tongue
- English Good