

CURRICULUM VITAE

PARTHA MUKHOPADHYAY

The Institute of Mathematical Sciences, Chennai, India



May 5, 2025

Research Interests

- Foundations of theoretical physics - particularly (but not limited to) quantum field theory, gravity, quantum mechanics, and statistical physics.

Skills

- Technical Skills:
 - * Theoretical Physics: string theory, gravity, quantum field theory.
 - * Programming: \LaTeX , Mathematica, Cadabra, Python (beginner)
 - * Platforms: Zoom, Telegram, YouTube, Enabla, LinkedIn, GitHub
- Pedagogical Skills:
 - * Teaching and curriculum design for undergraduate and graduate physics
 - * Project supervision and academic mentoring
 - * Open-access educational content creation

Open Access Course Initiative

Quantum Field Theory in Path Integral Approach I

May 2023 – Present

Graduate Level

- Weekly structured lectures on [YouTube](#)
- Chapter-wise presentation on [Enabla](#)
- Weekly Q&A sessions over Zoom (registration through [Telegram](#))

Experience

Faculty of Theoretical Physics

2008 – Present

The Institute of Mathematical Sciences, Chennai, India

- Teaching and mentoring graduate and undergraduate students.
- Research in string theory, gravity, and quantum field theory.
- Organized conferences and reviewed journal submissions.
- Service to institute's administrative and hiring committees.

Postdoc and Visiting Positions¹

- University of Kentucky, USA - Postdoc (2003-2005), Visiting Scientist (2020-21), Visiting Professor (multiple terms).
- University of Cambridge, UK - Postdoc, DAMTP² (2005-07).
- Other institutions include: McGill, Stony Brook, Caltech, Penn State, etc.

¹The full list is available at

²Department of Applied Mathematics & Theoretical Physics

Education

PhD in Theoretical Physics (String Theory)

Harish-Chandra Research Institute, Prayagraj UP India

1997 – 2002

Master of Science (Physics)

University of Calcutta, Kolkata WB India

1995 – 1997

Bachelor of Science (Physics)

University of Calcutta, Kolkata WB India

1992 – 1995

Selected Research Talks³

- *Tempered Distribution Theory on a Lattice*, Univ. of Kentucky, Jan 2025
- *A Proposal for a Symmetry Preserving UV Cutoff*, Miami 2024 Physics Conference, Dec 2024
- *A Non-perturbative Approach to Self-force problem (Review)*, Univ. of Kentucky, May 2019
- *Covariant String Bits*, Chennai Strings meeting, Nov 2019
- *Tubular Geometry in Loop Space*, JINR, Russia, 2015

³The full list is available at