

# CURRICULUM VITAE

PARTHA MUKHOPADHYAY



June 28, 2025

## Research Interests

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

## Skills

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- Technical Skills:
  - \* Theoretical Physics: string theory, gravity, quantum field theory.
  - \* Programming:  $\text{\LaTeX}$ , 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

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### 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

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### 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 Positions<sup>1</sup>

- University of Kentucky, USA - Postdoc (2003-2005), Visiting Scientist (2020-21), Visiting Professor (multiple terms).
- University of Cambridge, UK - Postdoc, DAMTP<sup>2</sup> (2005-07).
- Other institutions include: McGill, Stony Brook, Caltech, Penn State, etc.

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<sup>1</sup>Full details in “Academic Experience” (see accompanying PDF or click here: [📄](#)).

<sup>2</sup>*Department of Applied Mathematics & Theoretical Physics*

## Education

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### PhD in Theoretical Physics (String Theory)

1997 – 2002

*Harish-Chandra Research Institute, Prayagraj UP India*

### Master of Science (Physics)

1995 – 1997

*University of Calcutta, Kolkata WB India*

### Bachelor of Science (Physics)

1992 – 1995

*University of Calcutta, Kolkata WB India*

## Selected Research Talks<sup>1</sup>

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- *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