# CURRICULUM VITAE

## Partha Mukhopadhyay



May 7, 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 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.

<sup>&</sup>lt;sup>1</sup>Full details in "Academic Experience" (see accompanying PDF or click here:  $\nearrow$ ).

<sup>&</sup>lt;sup>2</sup>Department 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 Talks<sup>1</sup>

- 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