

Sandeep Aashish

Office: 4/317, Dept. of Physics, IIT Patna
Web: <https://www.iitp.ac.in/~aashish>

Ph: +91 6115-233-979
Email: aashish@iitp.ac.in

EDUCATION	Ph.D. Physics, IISER Bhopal 08/2016 - 07/2020 Thesis: Covariant Quantum Gravitational Corrections to Scalar and Tensor Field Models Advisor: Prof. Sukanta Panda
	Integrated M.Sc. Physics, BITS Pilani 07/2012 - 05/2016 Thesis: Radiation Reaction as a Non-conservative Force Advisor: Dr. Asrarul Haque
PROFESSIONAL EXPERIENCE	Assistant Professor since 05/2023 Dept. of Physics, Indian Institute of Technology Patna
	Postdoc (Remote) 10/2022 - 05/2023 Aarhus University, Denmark and Truust Neuroimaging Inc., USA Advisor: Prof. Henrik D. Kjeldsen
	Assistant Professor 07/2021 - 07/2022 Dept. of Physics, KARE Krishnankoil (TN)
	Postdoc 08/2020 - 06/2021 IISER Bhopal Advisor: Prof. Sukanta Panda
RESEARCH	Publications <ul style="list-style-type: none">• Leading the “Signatures of New Physics (SigNPhy)” research group at IIT Patna.• 15 papers, 13 published in journals like JCAP, PRD, EPJC, Springer Proc., EJP.• 11 papers as corresponding author, 95+ citations, h-index 6 (March 2024).• Co-led the efforts to study the quantum and cosmological properties of antisymmetric tensor field and its connection to the search for new physics in the early universe. Conferences and talks <p>Attended 5 conferences/symposium, and delivered 20+ talks. <i>Selected talks/seminars:</i> Invited talk on Schroedinger’s birth anniversary, Magadh University, 08/2023 • TU Symposium, Tribhuvan University (Nepal), invited, 07/2021 • IUCSS Indiana University (USA), invited, 11/2020 • GRC HKUST (Hong Kong), 07/2019 • ICTS Bengaluru (India), 01/2019 • DAE symposium, IIT Madras (India), 12/2018 • WHEPP XVII IISER Bhopal (India), 12/2017.</p>
TEACHING AND SUPERVISION	2023-present <ul style="list-style-type: none">• Teaching Mathematical Methods, Atomic and Molecular Physics, Quantum Mechanics II, General Relativity and Cosmology, Numerical Techniques• Supervising 4 M.Sc./B.Tech. thesis students, 2 PhD students.• Two graduated M.Sc. students (alumnus) selected for PhD at IIT Kanpur and IISER Trivandrum. 2021-2022 <ul style="list-style-type: none">• Taught Physics (Foundation) course to B.Tech. I year at KARE.• Guided two B.Tech. students and one M.Sc. Physics towards audit project and M.Sc. thesis project, respectively.• One graduated M.Sc. student pursuing PhD at ICTS (TIFR) Bengaluru. 2016-2020 <ul style="list-style-type: none">• Taught “Crash course on QFT” (summer 2017).• Tutored courses like Mathematical Physics, Quantum Mechanics, Cosmology, Electromagnetic Theory.

AWARDS AND
ACHIEVEMENTS

- Awarded and declined KREA Postdoctoral Fellowship (2021), ITPC Zhejiang University Fellowship (2020), UNESCO-UCAS ICTP Asia Pacific Fellowship (2020).
- Foreign Travel Grant by CSIR (2019), CSIR-JRF AIR 43 (2016), IIT-JEE AIR 6451 (2012).
- Best Paper Publication award by BITSAA (2015).
- INSPIRE scholarship awarded and foregone (2012), Dakshana Scholarship (2010).
- Founded Physics Studio journal club (2017) at IISERB, TheoPhII.org (2021) at KARE, rabbe-l EdTech self-learning platform (2022) and researchtor.org (2022) at YCombinator Startup School.