



SUBHADIP SAU

Assistant Professor (Ph.D.)

CONTACT

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📄 Subhadip Sau

SKILLS

LaTeX 7+ yrs

Mathematica 7+ yrs

Python 3+ yrs

Linux 5+ yrs

Teaching 5+ yrs

EDUCATION

Ph. D. - Physics

2017 - 2023

Indian Association for the cultivation of Science (IACS) - Kolkata, West Bengal (India)

Thesis title: "Search for modified gravity theories through the shadow of compact objects."

M. Sc. - Physics

2015 - 2017

Indian Institute of Technology (IIT) - Kharagpur, West Bengal (India)

Masters' Thesis work on "Indirect detection of Dark Matter".

B. Sc. - Physics

2012 - 2015

RamaKrishna Mission Residential College, Narendrapur - Kolkata, West Bengal (India)

Honours in Physics. The minor subjects were Mathematics and Chemistry.

WORK EXPERIENCE

Assistant Professor (W.B.E.S)

Aug 20 - Ongoing

Jhargram Raj College, Jhargram (West Bengal)

Taught courses both in offline and online mode. Various courses such as Quantum Mechanics, Mathematical Physics, Electromagnetic theory, Thermodynamics, Relativity etc. has been taught by me along with the laboratory classes.

Summer Project Guide

Jun 23 - Jul 23

Jhargram Raj College, Jhargram (West Bengal)

Guided a summer project titled, "Some aspects of spherically symmetric spacetime".

Teaching Assistant

Jan 20 - Jul 20

Indian Association for the Cultivation of Science, Kolkata (West Bengal)

Taken classes and solved assignments and prepared the solutions in LaTeX for the courses Electricity and Magnetism and Geometrical Optics.

ACHIEVEMENTS

GATE Physics

Qualified in 2017.

NET Physics

Qualified in 2016.

JEST Physics

Qualified in 2015, 2016, 2017.

JAM Physics

Qualified in 2015

Guest Faculty

All India Physics Forum, Midnapore

Aug 17 - Jul 21

Taken classes and prepared assignments in L^AT_EX.

PUBLICATIONS

- **Implications of axionic hair on shadow of M87***
Indrani Banerjee, Subhadip Sau, Soumitra SenGupta
[Phys.Rev.D 101 \(2020\) 10, 104057](#), [arXiv: 1911.05385](#)
- **Imprints of the Janis-Newman-Winicour spacetime on observations related to shadow and accretion**
Subhadip Sau, Indrani Banerjee, Soumitra SenGupta
[Phys.Rev.D 102 \(2020\) 6, 064027](#), [arXiv: 2004.02840](#)
- **Tidal heating of black holes and exotic compact objects on the brane**
Sumanta Chakraborty, Sayak Datta, Subhadip Sau
[Phys.Rev.D 104 \(2021\) 10, 104001](#), [arXiv:2103.12430](#)
- **Signatures of regular black holes from the shadow of Sgr A* and M87***
Indrani Banerjee, Subhadip Sau, Soumitra SenGupta
[JCAP09\(2022\)066](#), [arXiv:2206.12125](#)
- **Shadow of regular black hole in scalar-tensor-vector gravity theory**
Subhadip Sau, John W. Moffat
[Phys.Rev.D 107 \(2023\) 12, 124003](#), [arXiv:2211.15040](#)
- **Do shadows of Sgr A* and M87* indicate black holes with a magnetic monopole charge?**
Indrani Banerjee, Subhadip Sau, Soumitra SenGupta
[arXiv:2207.06034](#)

WORKSHOPS & CONFERENCES

[Python Programming in Astronomy, Astrophysics and Cosmology \(PPAAC\)](#)
IUCAA, Pune & GLA University, Mathura

July 2023

Attended all the lectures and hand-on session in the workshop.

[Advances in Astroparticle Physics and Cosmology\(AAPCOS\)](#)
Conducted by SINP, Kolkata

Jan 2023

Participation and Oral presentation

[32nd IAGRG meeting](#)
IISER Kolkata

Dec 2022

Participation and poster presentation