

NAME AND
AFFILIATION**Subhodeep Sarkar**

Junior Research Fellow (RSS2019005), Semester III
 Department of Applied Sciences
 Indian Institute of Information Technology (IIIT), Allahabad
 Prayagraj, Uttar Pradesh, India 211012

CONTACT
INFORMATION

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 IIIT Allahabad, Deoghat, Jhalwa,
 Uttar Pradesh, India 211012.

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RESEARCH
INTERESTS

General Relativity, Gravitation, and Black Hole Physics

EDUCATION

Indian Institute of Information Technology, Allahabad, Uttar Pradesh, India

Ph.D., Physics, *Expected*: Summer 2023

- Supervisor: [Prof. Srijit Bhattacharjee](#), IIIT, Allahabad
- Area of Interest: *Black Hole Physics*

Jamia Millia Islamia (Central University), New Delhi, India

M.Sc., Physics, June 2018

- Result: *Placed in First Class with Distinction*
- CGPA: *9.5*
- Rank *Second*
- Thesis Title: *The Generalized Proca Action in the Randall-Sundrum Braneworld Scenario*
- Supervisor: [Prof. Anjan Ananda Sen](#), Centre for Theoretical Physics, Jamia Millia Islamia
- Special Papers: General Theory of Relativity, Quantum Field Theory, Particle Physics, Classical Field Theory

Asutosh College, University of Calcutta, Kolkata, West Bengal, India

B.Sc.(Honours), Physics, June 2016

- Result: *First Class with Honours*
- Subjects: Physics (Honours), Mathematics (General), Computer Science (General)
- Relevant Courses: Special Theory of Relativity, Electromagnetic Theory, Numerical Analysis and Programming, Statistical Mechanics, Advanced Classical Mechanics, Quantum Theory I and II, Mathematical Methods I and II

National Gems Higher Secondary School, Kolkata, West Bengal, India

Indian School Certificate Examination - I.S.C. (Higher Secondary),
 May 2012

- Result: *Secured 96.00% (aggregate)*
- Subjects: Mathematics, Physics, Chemistry, Computer Science, English

Indian Certificate of Secondary Education - I.C.S.E. (Secondary),
 May 2010

- Result: *Secured 95.40% (aggregate)*
- Subjects: English, Mathematics, Science, Social Studies, Computer Applications

PUBLICATIONS
AND PREPRINTS**Published Papers**

1. S. Bhattacharjee, S. Kumar and S. Sarkar, “**Mass inflation and strong cosmic censorship in a nonextreme BTZ black hole**,” *Phys. Rev. D* **102**, no.4, 044030 (2020) doi:10.1103/PhysRevD.102.044030 [arXiv:2005.09705 [gr-qc]].

TEACHING EXPERIENCE	Teaching Assistant 2019 – Present XXXX XXXX - Engineering Physics Instructor: Dr. Srijit Bhattacharjee Department of Applied Sciences, IIIT, Allahabad
PROJECTS AND INTERNSHIPS	Project Student Dec 2018 to Mar 2019 Saha Institute of Nuclear Physics, Kolkata Supervisor: Prof. Koushik Dutta Topic: Vector Dark Matter Production at the End of Inflation M.Sc. Project Student Jul 2017 to May 2018 Centre for Theoretical Physics, Jamia Millia Islamia Supervisor: Prof. Anjan Ananda Sen Topic: Gravitation (Basics of General Relativity, Modified Theories of Gravity, Generalized Proca Theories, Warped Geometry and the Randall-Sundrum Model) Summer Student May 2017 to Jul 2017 Department of Theoretical Physics, Indian Association for the Cultivation of Science Supervisor: Prof. Dilip Kr. Ghosh Topic: A Reading Course on Quantum Field Theory Visiting Student Dec 2016 to Jan 2017 Quantum Information and Computation Group, Harish-Chandra Research Institute Supervisor: Prof. Ujjwal Sen Topic: A Reading Course on Quantum Entanglement and Quantum Information Theory
SKILLS	Computer Programming: • C, Python (NumPy, Matplotlib), Mathematica, Maple, LaTeX.
REFERENCES	Prof. Srijit Bhattacharjee Assistant Professor of Physics Department of Applied Sciences Indian Institute of Information Technology, Allahabad E-mail: srijitb@iiita.ac.in Prof. Lekha Nair Head and Professor of Physics Department of Physics Jamia Millia Islamia E-mail: lnair@jmi.ac.in Prof. Anjan Ananda Sen Professor of Physics Centre for Theoretical Physics Jamia Millia Islamia E-mail: aasen@jmi.ac.in Prof. Somasri Sen Assistant Professor of Physics Department of Physics Jamia Millia Islamia E-mail: ssen@jmi.ac.in

OTHER
INFORMATION

Date of Birth: July 17, 1993
Nationality: Indian
Religion: Non-Practicing Hindu
Languages: English, Bengali, Hindi
Date of C.V.: January 1, 2020