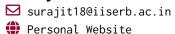
Surajit Biswas



Education

July 2018-Present

Ph.D., Indian Institute of Science Education and Research Bhopal (IIS-ERB), Madhya Pradesh, India

Senior Research Scholar in High energy physics (IISERB String Theory Group) Thesis title: "Asymptotically Flat Gravity and Quantum Entropy of Its Black Holes"

Auguest 2015-June 2017

M.Sc. in Physics, Presidency University, West Bengal, India

Specialization: Advanced condensed matter physics, Quantum field theory Thesis title: "The Quantum Higgs Phenomenon in Massless Scalar Electrodynamics".

Auguest 2012-July 2015

B.Sc. (Physics Honours), Chakdaha College, Kalyani University, West Bengal, India

Conferences, Workshops and Schools

July 24th-29th, 2023

Strings 2023

Venue: Perimeter Institute for Theoretical Physics, Waterloo, Canada

Venue: Indian Institute Of Technology Mandi, Mandi, India
Topics: de Sitter Holography, Black Hole Information Paradox, Scattering
Amplitudes, Black Hole Microstate Counting, Fluid Gravity Correspondence.

July 2th-8th, 2023

Quantum Black Holes, Quantum Information and Quantum Strings Venue: Asia Pacific Center for Theoretical Physics, Pohang, South Korea

Gong show given and poster presented on "Dual Theory of 3D Spin-3 Gravity"

June 14th-17th, 2023

Holography@25 Workshop

Venue: ICTP-SAIFR/IFT-UNESP, São Paulo, Brazil

June 5th-13th, 2023

Holography@25 School

Venue: ICTP-SAIFR/IFT-UNESP, São Paulo, Brazil

March 24th - 25th, 2023

In-House Physics Symposium 2023

Venue: Indian Institute of Science Education and Research Bhopal, Madhya Pradesh, India

Talk given and poster presented on "Implication of W(0,-2) algebra on 3D flat gravity theory"

January 9th - 18th, 2023

The 17th Kavli Asian Winter School (KAWS) on Strings, Particles, and Cosmology

Venue: Institute Of Basic Science, Daejeon, South Korea Gong show and poster presented on "Dual theory for maximally $\mathcal N$ extended flat Supergravity"

November 24th - 25th, 2022

Regional String Meet Bhopal Chapter

Venue: Indian Institute of Science Education and Research Bhopal, Madhya Pradesh, India

Conferences, Workshops and Schools (continued)

August 25th - 26th, 2022

■ National Assembly of Researchers In Physics (NARIΦ)

Venue: Indian Institute of Science Education and Research Bhopal, Madhya Pradesh, India

Poster presented on "Dual theory for maximally $\mathcal N$ extended flat Supergravity"

July 4th - 15th, 2022

■ Student Talks on Trending Topics in Theory (ST4) 2022 Workshop

Venue: Indian Institute Of Technology Indore, Indore, India

Topics: Asymptotic symmetries and Celestial Holography, Modular theory and Algebraic QFT, Landscape in String Theory and related topics, Bulk reconstruction and Tensor Networks, Machine Learning primary for Physicists

March 28th - 30th, 2022

Fundamental physics UK and Ministry of Education India 2022 Chennai- Southampton Workshop

Venue: Southampton University, United Kingdom Topics: *Holography, gauge theories and black holes*.

Feb 1st - 4th, 2022

Princeton Center for Theoretical Science Virtual Workshop on Celestial Holography '22

Venue: New Jersey, United States

Topics: Asymptotic symmetries, amplitudes, and CFT bootstrap methods.

Jan 10th - 23rd, 2022

Kavli Asian Winter School (KAWS) on Strings, Particles and Cosmology

Venue: ICTS-TIFR, Bengaluru, India

Topics: Black hole information paradox, gravitational S-Matrix, holography, conformal field theory.

October 18th - 22nd, 2021

School on Superstring Theory and Related Topics

Venue: Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste. Italy

Topics: Holography with averaging, aspects of the swampland symmetries, anomalies and topology

Feb 2nd - 5th, 2021

Princeton Center for Theoretical Science Virtual Workshop on Celestial Holography '21

Venue: New Jersey, United States

Topics: Asymptotic symmetries, amplitudes, and CFT bootstrap methods.

July 17th - 25th, 2019

Venue: Indian Institute of Science Education and Research Bhopal, Madhya Pradesh, India

Topics: D-brane in String Theory, fluid-gravity correspondence, Matrix models, QFT in curved spacetime, stability of spacetimes in general relativity

Visiting Experiences

September 26th - October 8th, 2023

■ Group visit

Venue: The Institute of Mathematical Sciences, Chennai, India Seminar presented on "W(0,b) algebra and the dual theory of 3D asymptotically flat higher spin gravity".

October 6th, 2023

■ Personal visit

Venue: Chennai Mathematical Institute, Chennai, India

Teaching Experiences

January 2020 - August 2022

Teaching Assistantship

Venue: Department of Physics, Indian Institute of Science Education and Research Bhopal, Madhya Pradesh, India

Courses:

Mathematical Methods by Dr. Auditya Sharma, Quantum Field Theory-I by Dr. Arnab Rudra, Classical Mechanics by Dr. Nabamita Banerjee, Nuclear Physics by Dr. Rahul Srivastava, Nuclear Physics by Prof. Rajiv Gavai.

Event Organizations

July 4th - 15th, 2023

Student Talks on Trending Topics in Theory (ST4) 2023 Workshop

Main Organizer (National Workshop)

Venue: Indian Institute Of Technology Mandi, Mandi, India

January 2022 - August 2023

■ IISERB Strings Journal Club

Coordinator

Venue: Indian Institute of Science Education and Research Bhopal, Madhya Pradesh, India

Achivements

June 2018 CSIR-UGC National Eligibility Test (NET) Junior Research Fellowship (JRF)

Rank - 142

April 2018 | Joint Entrance Screening Test (JEST) 2018

Rank - 81

Rank - 868

June 2016 CSIR-UGC National Eligibility Test (NET) Lectureship (LS)

Rank - 79

April 2015 | Joint Entrance Screening Test (JEST) 2015

Rank - 119

Research Publications

Journal and arXiv Articles

N. Banerjee, A. Bhattacharjee, **S. Biswas**, A. Mitra, and D. Mukherjee, "W(0, b) algebra and the dual theory of 3D asymptotically flat higher spin gravity," Aug. 2023. arXiv: 2308.11583 [hep-th].

Skills

Languages Advance reading, writing, and speaking competencies in English, Bengali and Hindi.

Coding Python, LTEX, Mathematica

Web Dev HTML, CSS, GitHub

Misc. Academic research, teaching, LaTEX typesetting and publishing.