Chiranjeeb Singha

Curriculum Vitae

PERSONAL DETAILS

DOB	April 3 , 1992
Address	Dighalgram, Bankura, West Bengal
Pin no	722201
Phone	(+91) 9051602323
Sex	Male
Category	General
Nationality	Indian
Mail (s)	chiranjeeb.singha@gmail.com chiranjeeb.singha@saha.ac.in

RESEARCH INTEREST

Quantum field theory in curved spacetime, Quasinormal modes, Strong cosmic censorship, Resonance Casimir-Ploder interaction, Cosmology

PROFESSIONAL EXPERIENCES

Research Associate 2021-now
Saha Institute of Nuclear Physics

.

Visiting position 2020-2021
Chennai Mathematical Institute

.

TEACHING EXPERIENCE

Mathematical Methods of Physics Basic Statistical Mechanics

EDUCATION

PhD in Physical Sciences 2014-2020
Indian Institute of Science Education and Research Kolkata

.

MS in Physical Sciences 2012-2014
Indian Institute of Science Education and Research Kolkata
CGPA:8.14 (Subsidiary subject : Mathematics)

.

BSc. in Physics (Honours) 2009-2012
Ramakrishna Mission Vivekananda Centenary College, West Bengal State University
62.13% (Subsidiary subjects : Mathematics and Chemistry)

.

Higher Secondary 2007-2009

Burdwan Town School, West Bengal Council of Higher Secondary Education

1st division, 73 %

.

Secondary 2005-2007

Dighalgram High School, West Bengal Board of Secondary Education

1st division, 84.75%

.

SKILLS

Languages	Bengali (mother tongue)
	English
	Hindi
Software	LaTeX
	Mathematica,MATLAB
	Fortran,C, Monte Python

PUBLICATIONS

1. Subhajit Barman, Golam Mortuza Hossain, **Chiranjeeb Singha**, "*Exact derivation of the Hawking effect in canonical formulation,*" **Phys. Rev. D 97, 025016 (2018)**.

2. Subhajit Barman, Golam Mortuza Hossain, **Chiranjeeb Singha**, "*Is Hawking effect short-lived in polymer quantization?,*" **J. Math.Phys. 60, no. 5, 052304 (2019)**.

3. Golam Mortuza Hossain, **Chiranjeeb Singha**, " *New coordinates for a simpler canonical derivation of the Hawking effect,*" **Eur. Phys. J. C 80 (2020) no.2, 82.**.

4. **Chiranjeeb Singha**, " *Remarks on distinguishability of Schwarzschild spacetime and thermal Minkowski spacetime using Resonance Casimir-Polder interaction,*" **Mod. Phys. Lett. A 35 (2020) 1950356**.

5. Supriya Pan, Weiqiang Yang, **Chiranjeeb Singha**, Emmanuel N. Saridakis, " *Observational constraints on sign-changeable interaction models and alleviation of the H_0 tension,*" **Phys. Rev. D 100, 083539 (2019)**.

6. Arpan Chatterjee, Saptarshi Saha, **Chiranjeeb Singha**, " *How the mass of a scalar field influences Resonance Casimir-Polder interaction in Schwarzschild spacetime,*" **EPL, 130 (2020) 50004**.

7. Saptarshi Saha, **Chiranjeeb Singha**, Arpan Chatterjee, "*Retarded resonance Casimir-Polder interaction of a uniformly rotating two-atom system,*" **Eur. Phys. J. C 81 (2021) no. 3, 265**.

8. Saptarshi Saha, Arpan Chatterjee, **Chiranjeeb Singha**, "*Can a pure state remain pure in the Unruh effect?,*" **arXiv: 2105.14712 [quant-ph], Submitted to journal**.

9. **Chiranjeeb Singha**, " *Thermodynamics of multi-horizon spacetimes,*" **arXiv:2108.11704 [gr-qc], accepted for publication in General Relativity and Gravitation**.

10. **Chiranjeeb Singha**, Subhashish Banerjee," *Thermal radiation in curved spacetime using influence functional formalism,*" **Phys. Rev. D 105, 045020 (2022)**.

11. Pritam Nanda, **Chiranjeeb Singha**, Pabitra Tripathy, Amit Ghosh, " *Hawking radiation as quantum mechanical reflection,*" **arXiv:2203.06588 [gr-qc], Submitted to journal** .

12. **Chiranjeeb Singha**, Sumanta Chakraborty, Naresh Dadhich," *Strong cosmic censorship conjecture for a charged BTZ black hole,*" **arXiv:2203.07708 [gr-qc], Submitted to journal** .

13. Sayantan Choudhury, Satyaki Chowdhury, Nitin Gupta, Anurag Mishara, Sachin Panneer Selvam, Sudhakar Panda, Gabriel D. Pasquino, **Chiranjeeb Singha**, Abinash Swain, "*Circuit Complexity From Cosmological Islands,*" **Symmetry 13 (2021) 1301** .

REFEREE OF THE JOURNALS

General Relativity and Gravitation

EDITORIAL BOARD MEMBERS OF THE JOURNALS

American Journal of Modern Physics

TALKS & SEMINARS

1. Invited to visit the Department of Physical Sciences at IISER Mohali for a week, from 18/11/2018 to 23/11/2018.

2. Oral Presentation at the 30^{th} meeting of the Indian Association for General Relativity and Gravitation(IAGRG) on 05/01/2019. The title of my talk "Exact derivation of the Hawking effect in canonical formulation".

3. Oral Presentation in the Conference of "Current Developments in Quantum Field Theory and Gravity" on 5^{th} December, 2018 at SN Bose National Centre for Basic Sciences. The title of my talk "An exact derivation of the Hawking effect in canonical formulation".

4. Invited to visit the Department of Physics of IIT Ropar for a week, from 18/08/2019 to 24/08/2019 and gave a seminar based upon my research work and interests.

5. Gave online seminar on 28/07/2020 at IACS Kolkata. The title of my talk "Hamiltonian-based derivation of the Hawking effect".

6. Gave online seminar at 14th International Conference on Gravitation, Astrophysics and Cosmology (ICGAC14) on 21/08/2020. The title of my talk "Hamiltonian-based derivation of the Hawking effect".

7. Gave online Presentation at the 31^{st} meeting of the Indian Association for General Relativity and Gravitation(IAGRG) on 20/12/2020. The title of my talk "Hamiltonian-based derivation of the Hawking effect".

SCHOOLS & TALKS

1. Participated in the 1^{st} "Topical Conference on Gravity and Cosmology" meeting on 13^{th} December, 2013 at Saha Institute of Nuclear Physics.

2. Participated in the 2^{nd} "Topical Conference on Gravity and Cosmology" meeting on 9^{th} August, 2014 at Presidency University.

3. Participated in the 3^{rd} "Topical Conference on Gravity and Cosmology" meeting on 28^{th} February, 2015 at IIT Kharagpur.

4. Participated in the 4^{th} "Topical Conference on Gravity and Cosmology" meeting on 19^{th} September, 2015 at IISER Kolkata.

5. Participated in the 5^{th} "Topical Conference on Gravity and Cosmology" meeting on 19^{th} March, 2016 at Indian Statistical Institute Kolkata.

6. Attended the Lecture Series on "The Black hole Information Paradox" by Prof. Samir D. Mathur at IIT Gandhinagar from June 27th, 2016 to July 8th, 2016.

7. Participated in the 6^{th} "Topical Conference on Gravity and Cosmology" meeting on 24^{th} September, 2016 at Visva Bharati.

8. Participated in the 7^{th} "Topical Conference on Gravity and Cosmology" meeting on 25^{th} March, 2017 at Indian Association for the Cultivation Of Science

9. Attended the 29^{th} meeting of the Indian Association for General Relativity and Gravitation(IAGRG) from May 18, 2017 to May 20,2017.

REFERENCES

Dr. Golam Mortuza Hossain, Associate Professor, Dept: Physical Sciences, IISER Kolkata, E-mail: ghossain@iiserkol.ac.in
Prof. Narayan Banerjee, Professor, Dept: Physical Sciences, IISER Kolkata, E-mail: narayan@iiserkol.ac.in
Dr. Sumanta Chakraborty, Faculty Fellow , School of Physical Sciences, Indian Association for the Cultivation of Science (IACS), E-mail: tpsc@iacs.res.in