

Dr. Shriton Hembrom

Curriculum Vitae

Address

Vill- Haripur, P.O- Gopalpur hat, P.S- Habibpur, Dist- Malda, West Bengal, 732122, India.
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Profile summary

Innovative teaching professional with experience in developing engaging course materials and fostering student interaction. Actively involved in collaborative research projects and publishing high-impact papers. Research interests include Classical, Quantum Cosmology and Noether Symmetry Analysis.

Education

2025 **Ph.D in Mathematics - Jadavpur University** , *Kolkata-700032, West Bengal, India,* **Course Work Exam:** 86.5 **percent**
Thesis Title: Classical and Quantum Cosmology from Various Gravity Theories: Noether Symmetry Approach.

2020 **M.Sc in Mathematics, Jadavpur University** , *Kolkata-700032, West Bengal,* 57.80 *percent.*

2017 **B.Sc in Mathematics, Jadavpur University**, *Kolkata-700032, West Bengal,* 48.58 *percent*

2013 **H.S in Science, WBCHSE**, *A.C Institution, Malda, West Bengal,* 68.20 *percent*

2011 10^{th} **exam, WBBSE**, *Manikora High School(H.S), Malda, West Bengal,* 71.5 *percent*

National Certificates

CSIR-NET, 2024
GATE, 2022.

Work Experience

08.2025–present **Assistant Professor**, *Regent Education and Research Foundation Group of Institution, Department of Basic Science and Humanities (BSH), Barrackpore, Kolkata-700121, W.B*

Teaching: Linear Algebra, Group Theory, Ordinary differential Equation, Partial Differential Equation, Numerical Analysis, Probability and Statistics, Operation Research(LPP).

01.2023–06.2025 **Part time lecturer**, *Sonarpur Mahavidyalaya, Calcutta Univesity, Department of Mathematics, Kolkata-700149, W.B*

Teaching: Linear Algebra, Calculus, Real Analysis, 2D-Geometry, Ordinary Differential Equation, Partial Differential Equation.

Skills and Activities

Programming Language	Maple, Mathematica, MATLAB,C++, Certificate Course in Advance Programming (CCAP), Python.
Environment	Latex, Microsoft Office, Canva
Operating System	Windows, Linux

Faculty Development Programme (FDP)

1. NPTEL- AICTE FDP Course on **"The Joy of Computing using Python"**.

Publications

1. "Classical and quantum cosmology for two scalar field Brans–Dicke type theory: a Noether symmetry approach", S Hembrom, R Bhaumik, S Dutta, S Chakraborty - **The European Physical Journal C**, 84, 110 (2024).
2. "Noether symmetry analysis for fourth-order modified gravity theory: Cosmological solution and evolution" S Hembrom, R Bhaumik, S Chakraborty - **International Journal of Modern Physics A**, 39, 2450058 (2024).

3. "Classical and quantum cosmology in Weyl integrable gravity: A Noether symmetry approach",D Das, S Hembrom, R Bhaumik, S Chakraborty - **International Journal of Geometric Methods in Modern Physics**, (2024).

4. "Symmetry analysis in multi scalar-torsion cosmological model with quantum description" S Hembrom, R Bhaumik, S Dutta, S Chakraborty - **The European Physical Journal C**, 84, 1054 (2024).

5. "Quantum Cosmology in Bianchi-I model: A study of symmetry analysis"D Laya, S Hembrom, S Dutta, S Chakraborty - **Journal of Subatomic Particles and Cosmology**, 1-2 ,100013 (2024).

6. "A study of classical and quantum cosmology in modified teleparallel gravity and the role of Noether symmetry" D Laya, S Hembrom, S Dutta, S Chakraborty - **The European Physical Journal C**, 85, 58 (2025).

7. "Symmetry of the physical space and quantum cosmological description for non-minimally coupled scalar field cosmology", S Hembrom, D Laya, S Dutta, S Chakraborty- **Journal of Subatomic Particles and Cosmology**, 3, 100048 (2025).

8. "A Classical and Quantum description of Einstein-Gauss-Bonnet scalar field cosmology versus scalar field cosmology-A Noether symmetry approach", S Das, S Hembrom, S Chakraborty, **International Journal of Modern Physics A** 40(27), 2550128.

9. "Classical and Quantum Cosmology in a k-essence type scalar field model", S Mondal, S Hembrom, S Dutta, S Chakraborty - **Modern Physics Letters A**,(2026).

Internatinal Conferences

1. International Conference on Relativistics Astrophysics, Cosmology and quantum Realities (ICRACQR-25), Sponsored by IUCAA, Pune and organized by Department of Physics, Malda College, West Bengal.

2. International Conference on "Emerging Trends in Mathematical Sciences and Computing (IEMSC-24) Held in Institute of Engineering and Management, Kolkata.

3. International Conference on "Multidisciplinary Research Methodology and IPR 2023" organized by Research and Development Cell and IQAC, Bhairab Ganguli College, India and Swami Vivekanada University, India in Association with Azteca University, Mexico.

4. 2nd International Conference on "Mathematical Analysis and applications in Modeling" organized by Department of Mathematics and CMBE, Jadavpur University, 2023.

Conference Organizer Committee:

1. participated as member of the Organizing Core committee for the **International Conference on Advanced Materials, Energy, Stactural Engineering and Operation Management (AMESEOM),2026** organized by R&D cell, RERFGI, Barrackpore, held on 5th-6th June, 2026. DOI-https://doi.org/10.5281/zenodo.20394675.

Personal Information

Citizenship:	Indian
Date of Birth:	2^{nd} September,1995
Language Known:	English, Hindi, Bengali, Santali.

Hobbies

Writing, Playing, Social activities

Extra Curricular

- At present I am a Member of Institution's Innovation Council (IIC) Cell of Regent Education and Research foundation group of Institutions.
- I was a former President of a social apolitical student organization named **Jadavpur University Santal Students' Welfare and Cultural Association (JUSSWCA)** for the academic year 2024-25.
- **JUSSWCA** organized in Remembrance of the 121st Birth anniversary of Pandit Ragunth Murmu a National Seminar on Commemorating 100 years of the Olchiki Script and exploring International Perspectives on Santali Language, Literature, Culture, ethnic Identity and its Preservation, in collaboration with Adibasi Socio Educational and Cultural Association (ASECA), West Bengal.

