

CURRICULUM VITAE

AKASH BOSE



ADDRESS

385, Bosenagar, P.O.+P.S. Madhyamgram
North 24 Parganas, Kol-700129
West Bengal, India
Mob. No.: 07044599975
Email: bose.akash13@gmail.com
Google
Scholar: <https://scholar.google.com/citations?hl=en&user=c0z2fzwAAAAJ>

PERSONAL DETAILS

Parent's Name: Debasish Bose & Ratna Bose
Gender: Male
Date of Birth: 19th February, 1996
Caste: General
Place of Birth: Barasat
Citizenship: India

PRESENT DESIGNATION

08/01/2026 - Now Assistant Professor I, Department of Mathematics,
School Of Basic & Applied Science (SOBAS), Adamas University

ACADEMIC HISTORY:

08/09/2023 Ph.D.(Sc.) (in Mathematics)
University: Jadavpur University.
Thesis Title: Unification of Different Cosmological Ages in Modified Gravity Theories and Study of Warm Inflation.
Supervisor: Prof. Subenoy Chakraborty.

2021 Ph.D. Course-work (in Cosmology) - 89.5% .
University: Jadavpur University.

2018 M.Sc. (in Mathematics) - 87.8% .
University: Jadavpur University.
Specialization : Cosmology, General Theory of Relativity.

- 2016 B.Sc. (Hons. in Mathematics) - 91.08% .
University : Jadavpur University.
Special Paper: Mathematical Physics.
- 2013 Higher Secondary (10+2 Standard) - 87% .
School: Barasat Mahatma Gandhi Memorial High School.
Board: West Bengal Council of Higher Secondary Education.
- 2011 Madhyamik Pariksha (10 Standard) - 86.5% .
School: Barasat Mahatma Gandhi Memorial High School.
Board: West Bengal Board of Secondary Education.
-

FELLOWSHIP/SCHOLARSHIP

- 08/2021-08/2023 UGC SRF (ID-1207/CSIRNETJUNE2019)
- 08/2019 -08/2021 UGC JRF (ID-1207/CSIRNETJUNE2019)
- 2013 - 2018 Inspire Scholarship, funded by Department of Science and Technology (DST), Government of India and Scholarship for College and University Students funded by Department of Higher Education, Ministry of Human Resource Development (MHRD), Government of India; during B. Sc. and M. Sc.
- 2006-2008 National Means-Cum-Merit Scholarship
-

AWARD

- June, 2019 CSIR-UGC NET (JRF) (Rank: 68)
- 2019 GATE (Score: 472, Rank: 381)
- June, 2018 CSIR-UGC NET (LS) (Rank: 37)
- 2018 GATE (Score: 383, Rank: 1033)
- 2013 INSPIRE
- 2013 WBJEE (Rank: 1652)
-

TEACHING EXPERIENCE

- 01/2026 - Now I have taken class in various departments of Engineering and Technology, Adamas University
- 02/2021 - 05/2021 I have taken class of the lateral students of Engineering and Technology, Jadavpur University
- 07/2019 - 06/2020 I have taken class in various departments of Engineering and Technology, Jadavpur University

Courses	Engineering Mathematics– II(MTH11502), Adamas University Numerical Techniques Lab(MTH12531), Adamas University Introduction to Python Programing(MTH108), Adamas University
Topics	Differential equation, Linear Algebra, Real Analysis, Numerical Analysis, 3D geometry, Python Programming

COMPUTATIONAL SKILLS

Operating System : Linux, Windows.
Programming Languages : C, Python.
Software Packages : LaTeX, MATHEMATICA, MAPLE.

RESEARCH TOPICS

Cosmic Evolution, Inflationary paradigm,
Raychaudhuri equation, Observational cosmology.

LANGUAGE SKILLS

Bengali, English, Hindi (Speak + Write)

LIST OF PUBLICATIONS

- Title :** Late-time constraints on homogeneous and isotropic FLRW cosmology with torsion
Author(s) : Akash Bose
Journal Ref. : Annals Phys. 470, 169813 (2024) **Impact Factor :** 3.0
DOI : 10.1016/j.aop.2024.169813
- Title :** A Non-equilibrium thermodynamical study of warm inflation and Swampland conjectures
Author(s) : Akash Bose, Subenoy Chakraborty
Journal Ref. : Pramana 98, no.3, 118 (2024) **Impact Factor :** 1.9
DOI : 10.1007/s12043-024-02821-3
- Title :** Theoretical and Observational prescription of Warm Inflation in FLRW universe with torsion
Author(s) : Madhukrishna Chakraborty, Gopal Sardar, Akash Bose, Subenoy Chakraborty
Journal Ref. : Eur. Phys. J. C, 83, no.9 , 860 (2023) **Impact Factor :** 4.2
DOI : 10.1140/epjc/s10052-023-12030-8
- Title :** The Raychaudhuri equation in inhomogeneous FLRW space-time: A $f(R)$ -gravity model

- Author(s)** : Madhukrishna Chakraborty, **Akash Bose**, Subenoy Chakraborty
Journal Ref. : Phys. Scr. 98, no.2, 025007 (2023) **Impact Factor** : 2.6
DOI : 10.1088/1402-4896/acb020
5. **Title** : Observational constraints on $f(R, T)$ gravity with $f(R, T) = R + h(T)$
Author(s) : Gopal Sardar, **Akash Bose**, Subenoy Chakraborty
Journal Ref. : Eur. Phys. J. C 83, no.1, 41 (2023) **Impact Factor** : 4.2
DOI : 10.1140/epjc/s10052-022-11156-5
6. **Title** : Analytic Solutions and Observational support: A study of $f(R, T)$ gravity with $f(R, T) = R + h(T)$
Author(s) : **Akash Bose**, Gopal Sardar, Subenoy Chakraborty
Journal Ref. : Phys. Dark. Univ. 37, 101087 (2022) **Impact Factor** : 5.1
DOI : 10.1016/j.dark.2022.101087
7. **Title** : Does fractal universe favour warm inflation: Observational support?
Author(s) : **Akash Bose**, Subenoy Chakraborty
Journal Ref. : Nucl. Phys. B 978 (2022), 115767 **Impact Factor** : 2.8
DOI : 10.1016/j.nuclphysb.2022.115767
8. **Title** : Is warm inflation quasi-stable?
Author(s) : **Akash Bose**, Subenoy Chakraborty
Journal Ref. : Phys. Dark. Univ. 35, 100938 (2022) **Impact Factor** : 5.1
DOI : 10.1016/j.dark.2021.100938
9. **Title** : Collapse geometry in inhomogeneous FRW model
Author(s) : Sanjukta Chakraborty, **Akash Bose**, Subenoy Chakraborty
Journal Ref. : Int. J. Geom. Meth. Mod. Phys. 18 (2021) no.02, 2150019
Impact Factor : 1.8
DOI : 10.1142/S0219887821500195
10. **Title** : Does emergent scenario in Hořava-Lifshitz gravity demand a ghost field?
Author(s) : **Akash Bose**, Subenoy Chakraborty
Journal Ref. : Phys. Dark. Univ. 30 (2020), 100740 **Impact Factor** : 4.1
DOI : 10.1016/j.dark.2020.100740
11. **Title** : Cosmic evolution in $f(T)$ gravity theory,
Author(s) : **Akash Bose**, Subenoy Chakraborty
Journal Ref. : Mod. Phys. Lett. A35 (2020) no.36, 2050296
Impact Factor : 1.89
DOI : 10.1142/S021773232050296X
12. **Title** : Homogeneous and isotropic space-time, modified torsion field and complete cosmic scenario,
Author(s) : **Akash Bose**, Subenoy Chakraborty
Journal Ref. : Eur. Phys. J. C 80 (2020) no.3, 205 **Impact Factor** : 4.5
DOI : 10.1140/epjc/s10052-020-7771-7

SEMINARS/WORKSHOPS/CONFERENCES ATTENDED

1. Name : National Conference on Mathematics: Various Aspects in Society (NCMVAS – 2023)
Organizer/Funding Agency(ies) : Department of Mathematics & Centre for Mathematical Biology and Ecology, Jadavpur University
Presented(oral) a paper : Modified Gravity Theory: Thermodynamical Viewpoint
Held on : 13-14/03/2023.
2. Name : 32nd meeting of Indian Association for General Relativity and Gravitation (IAGRG32)
Organizer/Funding Agency(ies) : Department of Physical Sciences, Indian Institute of Science Education and Research (IISER) Kolkata
Presented(oral) flash talk + Poster : A new Fractal gravity model in context of Warm Inflation
Held on : 19-21/12/2022.
3. Name : Cosmology@CCSP-1: An Inaugural Conference on Current Status of Cosmology
Organizer/Funding Agency(ies) : The Thanu Padmanabhan Centre for Cosmology and Science Popularization (CCSP), SGT University, Gurugram, Delhi-NCR
Presented(oral) a paper : Warm Inflation in Fractal Universe
Held on : 17-19/10/2022.
4. Name : International Webinar on FOUNDATIONS FOR CONTEMPORARY MATHEMATICAL RESEARCH
Organizer/Funding Agency(ies) : Department of Mathematics, Manipur University, Canchipur, Imphal
Presented(oral) a paper : Comparative study between Einstein gravity and modified gravity theories
Held on : 08-10/11/2021.
5. Name : Recent Advances in Applied Mathematics : Theory and Computation (RAAMTC21)
Organizer/Funding Agency(ies) : Department of Applied Mathematics, University of Calcutta
Presented(oral) a paper : Different cosmological eras in $f(T)$ gravity and their Continuity
Held on : 27-29/03/2021.
6. Name : National Seminar on Recent Advances in Astrophysics and Cosmology
Organizer/Funding Agency(ies) : IUCAA Centre for Astronomy Research and Development (ICARD), Physics Department, North Bengal University
Presented(oral) a paper : Continuous evolution in $f(T)$ gravity
Held on : 24-25/03/2021.

7. Name : National Seminar on Mathematical Sciences (NSMS-2020)
Organizer/Funding Agency(ies) : Department of Mathematics, The University of Burdwan, Burdwan-713104
Presented(oral) a paper : Cosmic Evolution in Torsion Cosmology
Venue : The University of Burdwan, Burdwan-713104, West Bengal, India
Held on : 09-11/01/2020.

SEMINARS/WORKSHOPS/CONFERENCES PARTICIPATED

1. Name : Introductory Seminar on Astrophysics and Cosmology
Organizer/Funding Agency(ies) : IUCAA Centre for Astronomy Research and Development (ICARD), Physics Department, North Bengal University
Held on : 16/09/2020
2. Name : One day National Workshop on Basic Mathematics for 'Celebration of National Mathematics Day'
Organizer/Funding Agency(ies) : Department of Mathematics, Ramakrishna Mission Vivekananda Centenary College, Rahara
Held on : 16/03/2019.
3. Name : National Seminar on Current Trends in Mathematics and its Applications (NSCTMA-2019)
Organizer/Funding Agency(ies) : Department of Mathematics, Jadavpur University
Held on : 08/03/2019.

Akash Bose

Madhyamgram, February 17, 2026