# ALIPURDUAR COLLEGE

## P.O: ALIPURDUAR COURT, DIST: ALIPURDUAR

## WEST BENGAL, PIN CODE: 736122

### PERSONAL PROFILE

**Name**: PRASENJIT THAKUR

**Educational Qualifications**: M.Sc., B. Ed, Ph.D.

**Designation**: Assistant Professor

**Date of Joining**: 19.03.2005

**Area of Teaching**: Classical Mechanics, Solid State Physics and Electronics

**Research interest**: Cosmological Models, Dark Energy, Chaplygin Gas

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**Previous College:** N. A

Date of Retirement: 31. 03. 2038

# *RESEARCH AND ACADEMIC CONTRIBUTIONS:

**Title of M. Phil: None**

**Date of Award: N. A**

**Title of the Ph. D:** Observational constraints on equation of state parameters for cosmological models of the universe

**Date of Ph. D Award: 15. 02. 2016 (North Bengal University)**

**Post Doctoral Degree: N.A**

## Published Papers in National / International Journals:

1. P. Thakur, S. Ghose and B. C. Paul, "Modified Chaplygin gas and constraints on its B parameter from cold dark matter and unified dark matter energy cosmological models", Monthly Notices of Royal Astronomical Societies- 397 (2009) 1935-1939
2. B. C. Paul, P. Thakur and S. Ghose, "Constraints on exotic matter needed for an emergent universe", Monthly Notices of Royal Astronomical Societies-407 (2010) 415-419
3. B. C. Paul, S. Ghose and P. Thakur , "Emergent Universe from a composition of matter, exotic matter and dark energy", Monthly Notices of Royal Astronomical Societies-413 (2011) 686-690
4. S. Ghose, P. Thakur and B. C. Paul, "Observational Constraints on the Model parameters of a class of Emergent Universe", Monthly Notices of Royal Astronomical Societies **421** (2012) 20-24
5. B. C. Paul, P. Thakur and A. Saha", Modified Chaplygin Gas in Horava-Lifshitz Gravity and Constraints on its B parameter", Physical Review D 85 (2012) 024039
6. B. C. Paul and P. Thakur, "Observational constraints on modified Chaplygin gas from cosmic growth", Cosmology and Astroparticle Physics (JCAP) 11 (2013) 052
7. B. C. Paul, P. Thakur and M. M. Verma, "Observational constraints on modified Chaplygin gas in Horava- Lifshitz Gravity with Dark Radiation", Pramana-J. Phys. 81 (2013) 4
8. B.C. Paul, P. Thakur and A. Beesham ," Constraints on modified Chaplygin gas from large scale structure", Astrophysics and Space Science 361 (2016) 336
9. P. Thakur, "Recent observational constraints on generalized Chaplygin gas in

UDME scenario", Pramana- J. Phys. 88 (2017) 51

10. B. C. Paul and P. Thakur , " Observational constraints on EoS parameters of emergent universe", Astrophysics and Space Science 362 (2017) 73
11. P. Thakur, "Recent observational constraints on EoS parameters of a class of emergent Universe" , Pramana- J. Phys. 89 (2017) 27
12. B. C. Paul, P. Thakur and A. Saha, "Observational constraints on extended Chaplygin gas cosmologies", Pramana-J. Phys. 89 (2017) 29
13. P. Thakur," Observational constraints on Hubble parameter in viscous generalized Chaplygin gas", Indian Journal of Physics 92 (2018) 537-545
14. P. Thakur, " Observational constraints on EoS parameters of various modified Chaplygin gas", Indian Journal .of Physics 93 (2019) 1219-1232
15. P. Thakur, " Deceleration-acceleration transition red-shift of a class of modified Chaplygin gas from recent binned Hubble data", Indian Journal .of Physics(published online in march 2020) https://doi.org/10.1007/s12648-019-01381-2

# Publications other than Journal articles (books, chapter in books):

**Books with ISBN/ISSN number published by International Level Publishers: N.A**

**Books with ISBN/ISSN number published by National Level Publishers:**
**"Observational constraints on different cosmological models of the universe" by Dr. Prasenjit Thakur. ISBN NO: 978-81-931419-6-0**

**Invited Lectures delivered / Papers presented (National / State level Seminars): N.A**

## Articles/ Chapters published in Books:

Chapter: "Observational constraints on Chaplygin gas**: A review" by Dr. B. C. Paul and P. Thakur**

Book Name: **An Introduction to Astronomical Data Analysis**

ISSN/ISBN No: **978-3-639-85990-4**

Completed Project: Major & Minor

**Minor Research project vide UGC Reference No. F.PSW-73/12-13(ERO) dated 18.02.2013 (Sl No. 214146)**

Title of the Project: **Chaplygin gas as dark energy in different cosmological models**

## Papers Presented in Conferences, Seminars, Workshops, Symposia:

### International:

1. Prasenjit Thakur, "Modified Chaplygin gas as dark energy (DE)", International conference on Modern Trends in Social and Basic Sciences (MTSBS-2015) organised by Alipurduar College, Alipurduar, West Bengal –March 27-28, 2015

National: N.A

State Level Seminar: N.A

## Participation in Conferences, Seminars, Workshops, Symposia:

**(i)** "School on recent advances in cosmology (SRAC)" (February 21-26, 2011) – organised by IUCAA resource centre, Physics Department, NBU

**(ii)** "Workshop on data analysis: X-ray pulsars and compact objects" (December 01-03, 2011)- organised by IUCAA resource centre, Physics Department, NBU and High energy and cosmic ray research centre, NBU

**Other Academic Activities:** **N.A**

**Other Activities:** **Working as a member of Board of studies in Physics in NBU**

**Member of Professional Bodies:** **N.A**