## **LIST OF PUBLICATIONS (RESEARCH PAPERS)**

## > Published Book:

Author(s): Dr. Chayan Ranjit

Title: The Higher Dimensional Universe; A Cosmological View. Publisher: Lambert Academic Publishing, ISBN-13:978-3-330-02498-4

*Year: 2016* 

## > Published Paper(s):

Paper No.	TITLE	AUTHORS	JOURNAL DETAILS (UGC Approved)	Publishing Company
1.	Higher Dimensional Cosmology with Some Dark Energy Models in Emergent, Logamediate and Intermediate Scenarios of the Universe	1. Chayan Ranjit 2. Shuvendu Chakraborty 3. Ujjal Debnath	International Journal of Theoretical Physics (2012) 51:2180-2207 DOI <u>10.1007/s10773-012-1099-5</u>	Springer
2.	Study of a tachyonic field and its State-finder diagnostics in various scenarios of the anisotropic universe	Chayan Ranjit     Surajit     Chattopadhyay	Canadian Journal of Physics 90: 97-105 (2012) DOI: 10.1139/P11-143	NRC Research Press
3.	Observational constraints of modified Chaplygin gas in loop quantum cosmology	1. Shuvendu Chakraborty 2.Ujjal Debnath 3. Chayan Ranjit	The European Physical Journal C (2012) 72:2101  DOI 10.1140/epjc/s10052-012-2101-3	Springer
4.	Variable Modified Chaplygin Gas in Anisotropic Universe with Kaluza- Klein Metric.	1. Chayan Ranjit 2. Shuvendu Chakraborty 3. Ujjal Debnath	International Journal of Theoretical Physics (2013) 52:862-876 DOI <u>10.1007/s10773-012-1395-0</u>	Springer
5.	Observational constraints of homogeneous higher-dimensional cosmology with modified Chaplygin gas	1. <b>Chayan Ranjit</b> 2. Shuvendu Chakraborty 3. Ujjal Debnath	The European Physical Journal Plus (2013) 128: 53  DOI: 10.1140/epjp/i2013-13053-9	Springer
6.	Observational study of higher dimensional magnetic universe in non-linear electrodynamics	1. <b>Chayan Ranjit</b> 2. Shuvendu Chakraborty 3. Ujjal Debnath	Astrophys Space Science (2013) 346:291–299 DOI: 10.1007/s10509-013-1441-2	Springer
7.	Observational constraints of modified Chaplygin gas in RS II Brane.	1. <b>Chayan Ranjit</b> 2. Prabir Rudra 3. Sujata Kundu	Astrophys Space Science 347:423-431, (2013) DOI: 10.1007/s10509-013-1526-y	Springer

8.	How effective is new variable modified Chaplygin gas to play the role of dark energy—a dynamical system analysis in RS II brane model	Prabir Rudra     Chayan Ranjit     Sujata Kundu	Astrophys Space Science (2013) 347:433-444  DOI: 10.1007/s10509-013-1531-1	Springer
9.	Constraining Parameters of Generalized Cosmic Chaplygin Gas in Loop Quantum Cosmology	Chayan Ranjit     Ujjal Debnath	Astrophys Space Science 354:2126 (2014) DOI: <u>10.1007/s10509-014-2126-1</u>	Springer
10.	Reconstruction of Einstein-Aether Gravity from other Modified Gravity Models	Chayan Ranjit     Ujjal Debnath	The European Physical Journal Plus (2014) 129: 235  DOI: 10.1140/epjp/i2014-14235-7	Springer
11.	Dynamical System Analysis of Modified Chaplygin Gas in Einstein-Aether Gravity	Chayan Ranjit     Prabir Rudra     Sujata Kundu	The European Physical Journal Plus (2014) 129: 208  DOI: 10.1140/epjp/i2014-14208-x	Springer
12.	Study of Some Parameters of Modified Chaplygin Gas in Galileon Gravity Theory from Observational Perspective	1. <b>Chayan Ranjit</b> 2. Prabir Rudra 3. Ujjal Debnath	Canadian Journal of Physics (2014) 92: 1667–1675  DOI: 10.1139/cjp-2014-0287	NRC Research Press
13.	Red-shift parameterizations of dark energy and observational constraint on their parameters: Galileon gravity as background	Prabir Rudra     Chayan Ranjit     Sujata Kundu	Modern Physics Letters A Vol. 30, No. 31 (2015) 1550151 DOI: <u>10.1142/S0217732315501515</u>	World Scientific
14.	Observational data fitting to constrain Variable Modified Chaplygin Gas in the background of Horava-Lifshitz Gravity	Chayan Ranjit     Prabir Rudra	International Journal of Theoretical Physics (2016) 55:636-647 DOI 10.1007/s10773-015-2701-4	Springer
15.	A Systematic Approach With Data Fusion Technique in RFID Sensor Network Using Neuro-Fuzzy Technique	1.Sujata Kundu 2. <b>Chayan Ranjit</b>	International Journal of Computer Applications (2016) 139:9 DOI 10.5120/ijca2016909045	Foundation of Computer Science (FCS), NY, USA
16.	Study of Some Cosmological Parameters for Interacting New Holographic Dark Energy Model in f(T) Gravity	1. <b>Chayan Ranjit</b> 2. Prabir Rudra	International Journal of Modern Physics D (2016) Vol. 25, No. 1 (2016) 1650008  DOI: 10.1142/S0218271816500085	World Scientific
17.	Analysis of Interacting Entropy- Corrected Holographic and New Agegraphic Dark Energies	Chayan Ranjit     Ujjal Debnath	International Journal of Modern Physics D Vol. 27, No. 4 (2018) 1850035	World Scientific
18.	Observational constraints on Energy Momentum Squared Gravity through cosmic chronometers and Supernovae Type Ia data	1. Chayan Ranjit 2. Prabir Rudra 3. Sujata Kundu	DOI: 10.1142/S0218271818500359  Annals of Physics 428 (2021) 168432  Doi: 10.1016/j.aop.2021.168432	Elsevier

19.	Compact stellar models in modified gravity	1.I. G. Salako 2. Chayan Ranjit 3. M. Khlopov 4. Saibal Ray 5. Utpal Mukhopadhyay	International Journal of Modern Physics D (2021) 2140003 (16 pages) DOI: 10.1142/S0218271821400034	World Scientific
20.	Analysis of different scenarios with New Tsallis Holographic Dark Energies and Bulk Viscus uid in the framework of Chern-Simons modified gravity	1. Chayan Ranjit 2. Sayeedul Islam 3. Surajit Chattopadhyay 4. Ertan Gudekli	International Journal of Modern Physics A Vol. 36, No. 19 (2021) 2150151 (25 pages) DOI: 10.1142/S0217751X21501517	World Scientific Publishing Company
21.	A supply chain of a coastal biomass incorporating fuzzy deterioration and freshness under dynamic unit price	1.Rumpa Das 2. <b>Chayan Ranjit</b> 3. Manas Kumar Maiti	APPLICATION OF SOFT COMPUTING SN - 1433-7479 Online Published: 08-02-2024 DOI: https://doi.org/10.1007/s00500- 023-09615-6	Springer
22.	Cosmological effects on f(R, T) gravity through a nonstandard theory	1 Arijit Panda 2 Saibal Ray 3 Goutam Manna 4 Surajit Das 5 <b>Chayan Ranjit</b>	International Journal of Modern Physics D (2024) 2450015  DOI: 10.1142/S0218271824500159	World Scientific Publishing Company

## > CONFERENCES / SEMINARS / WORKSHOP:

- 1. Participated with a Poster Presentation in the 'International Conference on Modern Perspectives of Cosmology and Gravitation' held at ISI, Kolkata during February 07-11, 2012.
- 2. Participated a two days 'LaTeX WORKSHOP' program, offered by IIT Bombay and funded by National Mission on Education through ICT, MHRD, Govt. of India during March'2013.
- 3. Attained a Workshop on 'Observational Aspects of Astrophysics and Cosmology' organized by IRC Kolkata and Department of Physics, Visva-Bharati, Santinikatan during November 3-4, 2014.
- 4. Invited Talk presented in the seminar 'Recent Trends in Cosmology & Future Challenges' organized by Department of Physics (UG & PG), Prabhat Kumar College, Contai & Egra S.S.B. College, Egra, Purba Medinipur-721429, held on: 03-04/12/2015.

- 5. Participated in the two-days "International Seminar on Cosmology, Relativity and Gravity Waves" organized by The Asiatic Sociaty, Kolkata, held on: 15-16<sup>th</sup> Feb, 2016.
- 6. Attained a "One Day Symposium on New UG Syllabus (CBCS) of Mathematics" organized by Department of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University, Held On 13.09.2017.
- 7. Participated a "Orientation Programme OP-119" organized by 'UGC-HRDC, University Of Calcutta' from July 17- August 12, 2017.
- 8. Acted as a Convener of a 'Workshop on Experimental Physics and Mathematics' on 7th Feb., 2018 organized by Dept. of Physics, Mathematics & IQAC cell, Egra S.S.B. College, Egra, Purba Medinipur.
- 9. Participated a "1st Refreshers Course on Mathematical Science & Computing" organized by 'UGC-HRDC, University of Burdwan' from 24th July-13th August, 2018.
- 10. Acted as a Joint-Convener of a Two days International Seminar on 'Classical to Quantum Computing' on 15th Feb. to 16th Feb., 2020 organized by Dept. of Physics, Mathematics & Computer Science, Egra S.S.B. College, Egra, Purba Medinipur.
- 11. Participated one-week **Faculty Development Program** "Effectiveness Methodology & Assessment of Digital Education System" organized by Modern Institute of Engineering & Technology, Bandel, Hooghly 712123, West Bengal' from 8<sup>th</sup> June, 2020 to 12<sup>th</sup> June, 2020.
- 12. Participated a One-day state level webinar "CAS & New Regulation of UGC:

  Some relevant issues" organized by 'Khudiram Bose Central College' on 18th July, 2020.
- 13. Participated a Two-days National level Multidisciplinary webinar "Role of Guidance and Career Counselling in the perspective of Present Pandemic Situation of Covid 19" organized by 'Mankar College' from 5<sup>th</sup> August, 2020 to 6<sup>th</sup> August, 2020.

- 14. Participated a webinar "Graphical Demonstration as Teaching Aid in connection with the Syllabus of B.Sc. Mathematics (Hons.) under CBCS pattern" organized by 'Department of Mathematics & IQAC, Asutosh College' on 8th August, 2020.
- 15. Participated a Two-days National level webinar "Pure and Applied Mathematics" organized by 'Department of Mathematics (UG & PG), Behala College' from 9th August, 2020 to 10th August, 2020.
- 16. **Acted** as a **Joint-Convener** of a One-day National webinar on **'Recent Advances in Mathematical Science'** on 16<sup>th</sup> Aug., 2020 organized by Dept. of Mathematics, Egra S.S.B. College, Egra, Purba Medinipur.
- 17. Participated in a 'Two-Day State level Seminar on CAS, WBHS & Other Service Benefits for College Employees' organized by Women's College, Calcutta in collaboration with Bhairab Ganguly College from 8<sup>th</sup> June 2021 to 9<sup>th</sup> June 2021.
- 18. **Supervised** one student under the theme "**Classical & Quantum Gravity**" in the online Summer Research Program 202, organized by the Department of Physica, Prabhat Kumar College, Contai held from June 14 to September 30, 2021.
- 19. **Acted** as a Resource Speaker for **'Innovative Approaches of Computer Studies'** on 10<sup>th</sup> July, 2021organized by the Department of Computer Science, Vivekananda College. Thakurpukur.
- 20. Participated in "Inter/ Multi-Disciplinary Refreshers Course in Environmental Science and Echology" organized by UGC-HRDC, Ranchi University from 13th September 2022 to 26th September 2022.
- 21. Acted as a convener of a Two-day International Conference on Science,
  Technology and Management (ICSTM 2023), organized by the
  Department of Computer Science. Mathematics, Physics and Commerce
  of Egra Sarada Shashi Bhusan College, Egra, Purba Medinipur, West
  Bengal, India in Collaboration with Department Of Computer Science &

**Applications, Prabhat Kumar College**, Contai, Purba Medinipur, West Bengal, India from 25<sup>th</sup> April 2023 to 26<sup>th</sup> April 2023.