

ACADEMIC PROFILE



DR. DEBABRATA ADAK

Assistant Professor in Physics (W.B.E.S.)

M.Sc., Ph.D.

Email: debabrata.adak.sinp@gmail.com

- **Specialization:** Quantum Field Theory, Particle Physics
- **Date of joining in this college:** 26.02.2015
- **Total teaching experience in college level:** 11 years
- **Area of research:** Astrophysics and Cosmology
- **Title of Ph.D. thesis (if any):** “Studying Dark Energy From Theoretical And Observational Aspects Of Late-time Cosmic Acceleration” (INSPIRE-HEP: <https://inspirehep.net/files/5c4d0ae27c164e1c9cc1a960c59a7b76>)
- **Research guidance (if any):** Nil
- **Research projects [completed / ongoing] (if any):** Nil
- **List of publications:**

A. Published papers in Journals:

1. D. Adak, “Confronting Einstein Yang Mills Higgs dark energy in light of observations”, Eur. Phys. J. C **80** (2020) no.12, 1116 doi:10.1140/epjc/s10052-020-08709-x [arXiv:2007.07785 [astro-ph.CO]]. [I.F.- 4.59 (2020)]
2. U. Mukhopadhyay, D. Majumdar and D. Adak, “Evolution of Dark Energy Perturbations for Slotheon Field and Power Spectrum”, Eur. Phys. J. C **80** (2020) no.6, 593 doi:10.1140/epjc/s10052-020-8165-6 [arXiv:1903.08650 [gr-qc]]. [I.F.- 4.59 (2020)]
3. D. Adak and A. Ali, “Bounce and Collapse in the Slotheon Universe”, Int. J. Mod. Phys. D 26, no.09, 1750089 (2017) doi:10.1142/S0218271817500894 [arXiv:1610.01203 [gr-qc]]. [I.F.- 2.170 (2017)]

GOVERNMENT GENERAL DEGREE COLLEGE, SINGUR

B. Published papers in Seminars/Symposia/Conferences:

1. U. Mukhopadhyay, D. Majumdar and D. Adak, "Dark Energy Perturbation and Power Spectrum in Slotheon Model", Springer Proc. Phys. **261**, 919-923 (2021) doi:https://link.springer.com/chapter/10.1007/978-981-33-4408-2_131, (Contribution to 23rd DAE-BRNS High Energy Physics Symposium 2018).

C. Published Books / Chapters in Books:

1. Chapter 1: Review Article No. 2- "On the Galaxy Rotation Curves", "Advances in Modern and Applied Sciences: A Collection of Research Reviews on Contemporary Research (Volume 1)", Scientific Research Publishing, Inc., USA, Page No. 14-30, Year 2022, ISBN: 978-1-64997-437-2.

D. Participation in Seminars/Symposia/Conferences/Workshops:

Title of the invited lecture /paper (oral/poster)	Title of Conference /Seminar with date	Organized by	Level
--	--	--	--

➤ Participation in OP/RC/FIP/FDP:

Name of the Course	Place	Duration	Sponsoring Agency
119 th Orientation Programme	HRDC, University of Calcutta	17.07.2017-12.08.2017	UGC
3 rd Refresher Course in "Nano-Science & Nano-Technology"	HRDC, The University of Burdwan	14.09.2018-04.10.2018	UGC
Subject Refresher Course in Teacher Education (open to all) (Online Mode)	HRDC Aligarh Muslim University, Aligarh	09.05.2022 - 23.05.2022	UGC
Refresher Course in ICT (Interdisciplinary) (Online Mode)	UGC-MMTTC University of Kashmir, Srinagar	13.11.2024-29.11.2024	UGC

➤ Membership of Learned Societies/ Editorial Boards, etc. (if any): NIL

➤ Patents (if any): NIL

➤ Awards (if any):

1. Joint CSIR-UGC NET, June 2009 (CSIR JRF, Rank-61)

➤ Other notable activities (if any): NIL
