

ACADEMIC PROFILE



DR. APURBA KHETO

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

M.Sc., Ph.D.

Email: apurba.kheto@gmail.com

- **Specialization:** Particle Physics
- **Date of joining in this college:** 05.01.2021
- **Date of joining in this service (W.B.E.S.):** 02.03.2015
- **Total teaching experience in college level:** 11 years
- **Area of research:** Theoretical Astrophysics, Physics of Neutron star, Superfluidity in Neutron Star, Properties of Dense Matter.
- **Title of Ph.D. thesis :** Isospin dependent Entrainment in Rotating Superfluid Neutron Star (Supervisor: Prof. Debades Bandyopadhyay, Senior Professor & Head , Astroparticle Physics & Cosmology Divison, Saha Institute of Nuclear Physics, Kolkata; Ph.D. awarded on 05.04.2016).
- **Research guidance (if any):** NIL
- **Research projects [completed / ongoing] (if any):** NIL
- **List of publications:**

A. Published papers in Journals:

1. Isospin dependence of entrainment in superfluid neutron stars in a relativistic model , Apurba Kheto and Debades Bandyopadhyay, Phys. Rev. D 89, 023007 (2014) .
[DOI: <https://doi.org/10.1103/PhysRevD.89.023007>] [IF: 5.3].
2. Slowly rotating superfluid neutron stars with isospin dependent entrainment in a two-fluid model , Apurba Kheto and Debades Bandyopadhyay, Phys. Rev. D 91, 043006 (2015).
[DOI: <https://doi.org/10.1103/PhysRevD.91.043006>] [IF: 5.3].
3. Radial Oscillations of Neutron Stars with Antikaon Condensate , Apurba Kheto and Prasanta Char , Eur.Phys.J.A 59 (2023) 9, 201.
[DOI: <https://link.springer.com/article/10.1140/epja/s10050-023-01119-z>] [IF: 2.8].

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B. Published papers in Seminars/Symposia/Conferences:

1. Superfluid neutron stars with isospin dependent entrainment effect , Apurba Kheto and Debades Bandyopadhyay , *DAE Symp.Nucl.Phys.* 59 (2014) 814-815.

C. Published Books / Chapters in Books: NIL

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

Title of the invited lecture /paper presented (oral/poster)	Title of Conference /Seminar with date	Organized by	Level
Superfluid neutron star with isospin dependent entrainment effect	59th DAE Symposium on Nuclear Physics, December 8-12, 2014,	Banaras Hindu University, Varanasi, India	National
Global properties of slowly rotating superfluid neutron star with isospin dependent entrainment	7th International Conference on Physics & Astrophysics of Quark Gluon Plasma, February 2-6,2015	Variable Energy Cyclotron Centre , Kolkata , India	International

➤ Participation in OP/RC/FIP/FDP:

Name of the Course	Place	Duration	Sponsoring Agency
Refresher Course	UGC-HRDC, Aligarh Muslim University, Aligarh	05.12.2023 to 18.12.2023	UGC
Refresher Course	UGC-HRDC, Aligarh Muslim University, Aligarh	09.05.2022 to 23.05.2022	UGC
Faculty Induction Programme	UGC-HRDC, Aligarh Muslim University, Aligarh	08.02.2022 to 12.03.2022	UGC

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

➤ Patents (if any): NIL

➤ Awards (if any):

1. Qualified National Eligibility Test (NET) in 2010 (JRF in CSIR fellowship , AIR 41)

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➤ **Other notable activities (if any):** NIL
