Dr. APURBA KHETO

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

About Me:

I completed my undergraduate studies in Physics (Hons) at Ramakrishna Mission Vivekananda Centenary College (University of Calcutta), Rahara in 2009. After completing B.Sc course , I took admission to the University of Calcutta (Rajabazar Science College) for my M.Sc (Physics) degree. I have qualified the (CSIR-UGC) NET exam in December 2010 and completed M.Sc (Specialization in particle physics*)* in 2011. I have joined Saha Institute of Nuclear Physics (SINP) for Post-M.Sc Associate-ship course in 2011 for pursuing my doctoral degree. After completing Post-M.Sc course in 2012 , I have joined Astroparticle & Cosmology Division in Saha Institute of Nuclear Physics (SINP) for my active research under the supervision of Prof. Debades Bandyopadhyay. My field of research is Theoretical Astrophysics specifically in the f*ield* of Neutron star physics. During my research work at SINP, I have attended quite a few National and International Seminars and Conferences. I have published research papers in international referred journals. I have joined Maulana Azad College as an Assistant Professor in Physics (W.B.E.S) on 2nd March, 2015.

Qualifications:

Ph.D : Astroparticle and Cosmology divison, Saha institute of nuclear physics ,Kolkata awarded on 5 th April,2016 (Homi Bhaba National Institute, Mumbai).

Ph.D Thesis :
Thesis Title: 'Isospin dependent Entrainment in Rotating Superfluid Neutron Star'
Supervisor: Prof. Debades Bandyopadhyay, Senior Professor & Head , Astroparticle Physics & Cosmology Divison, Saha Institute of Nuclear Physics.

Current Teaching:

I have been teaching Undergraduate students (Honours & General) in physics for the last four years in this college under calcutta university. Now I am teaching Mathematical physics, Quantum Mechanics and Nuclear physics.

Research Interests:

1. Theoritical Astrophysics
2. Physics of Neutron star
3. Superfluidity in Neutron Star.
4. Properties of Dense Matter.

Selected Publications:

o Papers:

1. Isospin dependence of entrainment in superfluid neutron stars in a relativistic model , Apurba Kheto and Debades Bandyopadhyay,**Phys. Rev. D 89, 023007 (2014)** .

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).**

o Posters:

1. Global properties of slowly rotating superfluid neutron star with isospin dependent entrainment, Poster Presentation , at the 7th International Conference on Physics & Astrophysics of Quark Gluon Plasma, February 2-6,2015,Variable Energy Cyclotron Centre , Kolkata , India

2.Superfluid neutron star with isospin dependent entrainment effect, Poster presentation, at the 59th DAE Symposium on Nuclear Physics, December 8-12, 2014, Banaras Hindu University, Varanasi, India

o ***Conference Attended:***

1. One day Symposium in Astroparticle physics and Cosmology, Saha Institute of Nuclear physics,Kolkata ,India, January 3,2014.
2. Advances in Astroparticle Physics & Cosmology (APPCOS-2013),IIAS ,Shimla, Jun 14-17,2013.
3.Neutron Stars: Inside & Outside, SINP,Kolkata,India, October 18-19,2012.

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