Abhijit Chakraborty



Curriculum Vitae

Last updated on November 2016.

Personal Information

Born June 10, 1994 at Asansol, West Bengal, India

Citizenship Indian

Address G-2, Krishna Apartment, Aradanga, Asansol-713303, West Bengal, India **Institute** Indian Institute of Science Education and Research Kolkata, West Bengal, India

Education

- 2012–2017 **BS MS Dual Degree in Physics**, *Indian Institute of Science Education and Research Kolkata*, Kolkata, India, **Current CGPA:** (after 8 semesters) **9.49/10.**
- 2010–2012 Higher Secondary (10+2) in Science, Asansol Old Station High School, Asansol, India, Percentage Obtained: 93%.
- 2009–2010 Secondary Study (10th Grade), Asansol Ramakrishna Mission High School, Asansol, India, Percentage Obtained: 94.5%.

Achievements

- Selected for DAAD (Indo German Exchange program) WISE scholarship, 2015, for a summer internship at University of Heidelberg, Germany.
- Selected as a KVPY (Kishore Vaigyanik Protsahan Yojana) Fellow, 2010, Stream SA, All India Rank: 93. This is a program initiated by the Government of India to nurture the skills of students highly motivated to pursue a career in research.
- Awarded the Mamraj Agarwal Prize by the Governor of West Bengal, India for securing the 3rd rank in the state, in **10th standard** board exam conducted by West Bengal Board of Secondary Education (WBSE), West Bengal.
- Ranked among top 15 in the state of West Bengal in 12th standard board exam conducted by WBCHSE.
- Ranked among top 10 in **Achievement cum Diagnostic test in Mathematics**, 2007, organized by Center for Pedagogical Studies in Mathematics.

Master thesis

TitleStability analysis of various dark energy models: Quintessence and K-essenceSupervisorsProf. Narayan Banerjee, Dr. Anandamohan Ghosh

Institute Indian Institute of Science Education and Research Kolkata **Duration** June 2016 - Ongoing.

Research Experience

- Summer 2015 **Topic:** To investigate the 3-body encounters consisting of a binary supermassive black hole and stars from a globular cluster using chain regularization algorithm. **Supervisor:** Prof. Andreas Just, Faculty at ZAH (Center for Astronomy), ARI, University of Heidelberg, Germany.
- Summer 2014 Topic: A brief study on the properties of materials with negative refractive index and solid state analogue of black hole.
 Supervisor: Prof. Subir Ghosh, Faculty at Physics and Applied Mathematics Unit, Indian Statistical Institute, Kolkata.
- Summer 2013 **Topic:** The experimental study of the dynamics of two coupled modified Wienbridge Oscillator and Chua Oscillator. **Supervisor:** Dr. Md. Nurujjaman, Faculty at NIT, Sikkim.

2012 **Tenic** A new method of colving linear differential equations and its

Summer 2012 **Topic:** A new method of solving linear differential equations and its application in harmonic oscillator problem. **Supervisor:** Prof. Prasanta Panigrahi, Faculty at IISER Kolkata.

Other Educational Experiences

Attended a seminar on Particle detection at LHC, by Prof. Amitava Datta, at IISER Kolkata, 2012, Attended a popular lecture by Prof. Ashok Sen on Basics of string theory, at IISER Kolkata, 2014, Attended a lecture by Dr. Rajesh K. Nayak on Detection of Gravitational Waves by LIGO, at IISER Kolkata, 2016, Attended a lecture by Field Medalist Dr. Cedric Villani, at IISER Kolkata, 2016. Other academic projects carried out during course works: Radio-frequency inhomogeneity in NMR spectroscopy, Simulation of Rabi oscillations in a spin 1/2 system, Simulation of spreading of a disease in a population, Designing a 'Gauss Rifle'

Languages

Fluent speaker and good proficiency in listening and reading. General GRE Verbal score: **163/170 (92 percentile)**. TOEFL iBT :110, R-29, L-29, S-24, W-28. Mother tongue is Bengali and also well versed in Hindi.

Computer skills

- Scripting Languages: C, Python, Fortran 90, Matlab, R, Mathematica.
- Mark up languages: LATEX.

Extra-curricular Interests

I love reading story books and writing stories. I am also interested in playing football, table-tennis, and quiz. I have organized science events at my institute, and participated in local science exhibitions to demonstrate various phenomena to the layman. I love to travel and experience the culture of different places and people.