

## **Arindam Mukherjee:**

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Address(office) High Energy & Cosmic Ray Research Centre, University of North Bengal, Raja Rammounpur, PO-N.B.U., Dist-Darjeeling, West Bengal, Pin-734013, India.

Areas of Interest: Optical Astronomy, Stellar Data Analysis.

Number of Ph.D. students: a) Supervised : Nil                      b) Ongoing : Nil

Number of M.Phil. students: a) Supervised : Nil                      b) Ongoing : Nil

Number of Publications: 14 (International refereed journals-5; International refereed Conference Proceedings & Symposium-7; , Indian Science Congress-2)

Professional Experiences: About 1 year teaching experience & about 24 years of research experience.

Administrative Experience: About 24 years of administrative experience

Selected Publications:

- An Analysis of Cosmic Ray Air Showers for the determination of Shower Age, S. Sanyal, B. Ghosh, S. K. Sarkar, A. Bhadra, A. Mukherjee and N. Chaudhuri, Aust. J.Phys., 1993, 46, 589-96.
- Low and High Energy Muons In Extensive Air Showers of Size 104-106 Particles, Chakrabarti, C., Chanda, D., Saha, G., Mukherjee, A., Bhadra, A., Sanyal, S., Sarkar, S.K., Ghosh, B., Chaudhuri, N., 24th International Cosmic Ray Conference, Aug'28-Sept' 8, 1995 in Rome, Italy, 1995., Vol. 1, p.569.
- A New Lateral Distribution Function in Extensive Air Showers (EAS) Detected near Sea Level, B.Bhattacharyya, A.Bhadra, A.Mukherjee, G.Saha, S. Sanyal, S. sarkar, B.Ghosh and N.Chaudhuri,IL Nuovo Cimento, 1995, 18C,N-3,p-325
- Study of low energy hadronic interaction models based on BESS observed cosmic ray proton and antiproton spectra at medium high altitude, Arunava Bhadra, Sanjay K. Ghosh, Partha S. Joarder, Arindam Mukherjee, and Sibaji Raha, Phys. Rev. D 79, 114027 (2009) [9 pages]
- Impact of population density on Covid-19 infected and mortality rate in India ; Arunava Bhadra, Arindam Mukherjee, Kabita Sarkar; Modeling Earth Systems and Environment, Published 14 October, 2020.

Other Information:

- Created a group of outreach activity entitled “CRAGA (Cosmic Ray Group of Astronomy)” with participation of five other founder members attached to the Centre. Presently CRAGA has created its own website (<https://sites.google.com/view/cosmicraga/home>), YouTube, Instagram channel in 2020 along with a Facebook page where regular activities are uploaded /displayed.
- Built a six (6) inch Dobsonian Telescope for the Centre which is being used in different occasions for observations of planetary events. The picture of the telescope is available at CRAGA site.
- Taking regular classes as per schedule for the Geology (Hons’) for different semester in 2019, 2020
- Delivered special lectures for CRAGA, HECRRC, on ‘ *Sunspots: As it is seen and explored* ’, ‘ *On a quantum topic whose description is yet to be collapsed or determined* ’ etc.
- Delivered lectures in classes as per schedule for the Six-month duration Ph.D Course Work in the High Energy & Cosmic Ray Research Centre (HECRRC) for the sessions 2011-2012; 2012-2013; 2013-2014; 2014-2015.
- Took classes as per schedule for the Post M.Sc. Certificate Course entitled ‘Comprehensive Techniques in Experimental High Energy & Astrophysics’ (2004).
- Took classes as a invited resource person in the Training Program on “Hardware Maintenance and Assembly” held during the period 25th to 28th March, 2008 at USIC, UNB,
- As invited resource person in the “Workshop on Computing and Informatics” held during the period 15th to 18th March, 2010 at USIC, UNB
- delivered invited lecturers covering topics on spectroscopy & its applications in Biotechnology during 2009 & 2010 for M.Sc. Biotechnology, 2nd sem. students
- As a resource person in one M.Sc. Special paper in mathematics entitled “General relativity and astrophysics” as a part of interdisciplinary collaborative program between HECRRC and the deptt. of Mathematics (2012-13; semester-3)
- As a resource person in the training program of School Teachers of North Bengal by UNB in collaboration with IOTA (during 3/12/2010 to 5/12/2010)
- Guidance for project of 4th Semester of M.Sc.(Physics) students up to 2015;
- Visit Abroad-- Florence, Italy (2004).
- Visit at an Institute of national repute –TIFR (1995), IUCAA (2006)
- Positions held--Headship of the HECRRC (for three terms)
- Additional charges of departmental headship executed--Computer Centre (May 2011-2018); University Press; Watch & Ward and in few occasions as Secretary, ACL & Secretary, Science Faculty.
- Training received on:
- Experiments & analysis--The first SERC School in Experimental High Energy Physics at TIFR Bombay 1995; ‘Advanced Workshop in Astronomy: Observations, Theory and Interpretation’ held during April 5-9, 2010, UNB, etc.

- Programming skill-- Course on 'Fortran Programming with Numerical and Quantitative analysis(1993).Course in Unix & C Programming from the University of North Bengal (2001)
- Administration--"UGC sponsored Workshop for Officers of the State-aided Universities in West Bengal" held during 12th to 17th October 2001 at UNB, etc.