



Rajat Kumar Dey
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Indian Science Congress Assoc. (ISCA); Physics Teachers' Assoc. (PTA)

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Academic Qualifications:

Ph.D. (Astroparticle Physics), HECRRC, University of North Bengal

M.Sc. (Physics), University of North Bengal

Employments:

University of North Bengal, Associate Professor (**present**), Teaching, Research

University of North Bengal, Assistant Professor (**2007**), Teaching, Research

Behala College, CU, Assistant Professor (**2005**), Teaching, Research

MDGM High School (HS), Post Graduate Teacher (**1999**), Teaching

Scholarships/Fellowships/Awards:

Awarded direct MHRD Fellowship (JRF & SRF) for qualifying GATE

Cleared CSIR-UGC NET

Cleared WB SET

Cleared JWST (Conducted by SINP, Kol & IIMSc, Chennai)

Offered INFN (Italy) Post-Doctoral Fellowship

Awarded University Gold Medal for securing Rank-1 in **PG** Examination (Physics)

Awarded SERB - ITS & UGC travel supports **2013**

Awarded IAU Asia-pacific grant **2017**

Awarded SERB (ITS) travel support **2019**

Subject Specialization:

Nuclear and Particle Physics, Cosmic Ray Physics

Fields of Research Interest:

Theoretical and Experimental Astroparticle Physics

Astrophysics: Emission from Compact Objects (X-rays, Gamma-rays, Neutrinos)

No. of Ph.D. Students: (a) Supervised: **01** (b) Ongoing: **03**

No. of M.Phil. Students: (a) Supervised: **NA** (b) Ongoing: **NA**

No. of Publications: (a) Journal: **21** (b) Proceedings: **08** (International); **15** (National) (c) Book Chapter: **01** (d) Fermilab e-Proceeding/e-print: **01**

Collaborations:

Individual Collaborations:

Prof. A. R. Rao and Prof. V. R. Chitnis, TIFR, India

Prof. J. N. Capdevielle, APC, Paris, France

Informal Organizational Collaborations:

GRAPES-3 Experiment, Ooty, TIFR

HECRRC, NBU

Research Project Completed/Ongoing:

UGC Minor Research Project - Completed: **02 (1.9 lakh, 0.5 lakh)**

DST-SERB Major Research Project - Completed: **01 (25.55 lakhs)**

State Funded University Research Project - Ongoing: **01 (1.5 lakhs)**

Professional Experiences:

Teaching Experience: UG – **2** Years; IGNOU (UG) - **2** Years; DDE (PG-Math) – **2** Years; PG (Physics) – **15** Years (Classical Mechanics; Nuclear and Particle Physics; Astroparticle Physics; Quantum Mechanics)

Research Experience: **19** Years

Local Coordinator: Bose Test **2014**; JEST **2019**

Visiting Teacher: UGB **2015**

Academic Convener: National Conference - "Contemporary issues on High-Energy Physics"
– **2015**, Dept. of Physics, NBU

Expert Member (Evaluator) of a UGC Major Project – **2019**

Summer Internship Program Conducted: **Anubhab Sarkar**, NIT Rourkella - **2017**

Reviewer: IOP Journal – **1**; Springer (Physics) Journals – **1**; Malda College Journal

Associate Editor: Journal of Physics Research and Education (JPRE), Physics Dept., NBU

Supervised M.Sc. Projects: **35** Students, **2007 - 2018**

Administrative Experiences:

Convener: Anti-ragging squad, NBU, **2009 – 2011**

Member: Technical Committee, WBSTC - **2015**

Member: Convocation Committee – **2013, 2015, 2017, 2018**

Organizing Member: Project Evaluation Committee: DAE - **2013**, DST Fast-Track-**2013**,

Organizing Member: **DESY** Discussion Meeting, Sinclair's (Chalsa) – **2017**

Member: Library Committee, **2015 – Present**

Coordinator: PG Hostels Monitoring Committee, **2018 – Present**

Superintendent: Research Scholar Hostel (Men's), **2019 - Present**

Member: UG-CBCS Admission Committee – **2019 - Present**

Member: A Committee on Institutional Repository (NBU), **2020 - Present**

Convener: NAAC Research, Innovation sub-committee, **2020 - Present**

Member: University Student's Grievances Redressal Committee – **2021**

National Conference Organizing Member/Treasurer: Physics Dept. – **10**, HECRRC - **4**

Seminar/Invited Talks:

International Conference/Symposium: **Held Abroad: 03** (Rio de Janeiro-Brazil -**2013**,
Taipei-Taiwan – **2017**, Toyama-Japan-**2019**)

International Conference/Symposium: **Held in India: 04** (Kalyani University – **2013, 2015**
Andhra University – **2017**, HECRRC-NBU-**2013**)

National Conference/Symposium: **14** (BARC-Mumbai-**2013**, USIC-NBU-**2013**, Mumbai
University-**2015**, Mysuru University – **2016**, Delhi University- **2016**, Venkateswara

University-2017, IIT Madras-2018, Osmania University – 2018, Lovely Professional University-2019, GKVK-Bangalore-2020, HECRRC-NBU - 4)

Academic Visits to different Institutions:

GRAPES-3 Experiment, Ooty, TIFR, 2010, 2016

BARC, Mumbai, 2013

Dept.of High Energy Physics, TIFR, Mumbai, 2015

Taipei University of Science and Technology, 2017

Super-Kamiokande Experimental Site, ICRR, University of Tokyo, 2019

Selective List of Journal Publications: (2016 -2020)

1. **Rajat K. Dey**, Sabyasachi Ray and Sandip Dam, *Eur. Phys. J. Plus*, **135**:445 (2020).
2. **Rajat K. Dey**, Sandip Dam and Animesh Basak, *Europhys. Letts.* **127** 39002 (2019).
3. **Rajat K. Dey** in K. Chaudhury *et al.*, *Mon. Not. Roy. Astron. Soc.* **478** 4830 (2018).
4. **Rajat K. Dey**, Sandip Dam, Sabyasachi Ray, Animesh Basak and Pradip Chattopadhyay, *Indian J. Phys.*, **91(11)** 1357 (2018).
5. **Rajat K. Dey** and Sandip Dam, *Experimental Astron.*, **43**:75 (2017).
6. **Rajat K. Dey**, Sandip Dam and Sabyasachi Ray, *Indian J. Phys.* **91(4)** 359 (2017).
7. **Rajat K. Dey**, and Sandip Dam, *Eur. Phys. J. Plus*, **131**:402 (2016).
8. **Rajat K. Dey**, Sabyasachi Ray and Sandip Dam, *Europhys. Letts.* **115** 69002 (2016).