

# Teachers' Profile

1. **Name of the faculty member:** Dr. Subhendu Das
2. **Designation:** Assistant Professor
3. **Department:** Physics
4. **Email:** sd3das@gmail.com
5. **Mobile:** +91 7908014113
6. **Academic Qualifications:**



| Degree                   | Institution/University  |
|--------------------------|---|
| Ph.D. in Physics         | Saha Institute of Nuclear Physics (SINP), Kolkata, A Constituent Institutions (CI) of Homi Bhabha National Institute (HBNI), Mumbai |
| M.Sc. in Physics         | Indian Institute of Technology, Kharagpur   |
| B.Sc. (Hons.) in Physics | Krishnath College, University of Kalyani  |

7. **Date of joining in W.B.E.S:** 02.01.2025
8. **Date of joining this college:** 02.01.2025
9. **Research Interest:** Experimental Particle Physics
10. **Journal Publications**

- (a) Das, S., Datta, J., Majumdar, N., & Mukhopadhyay, S. (2022). Studies on electrical properties of Resistive Plate Chamber (RPC). *Journal of Instrumentation*, 17(09), P09041. doi:10.1088/1748-0221/17/09/P09041
- (b) Das, S., Tripathy, S., Jagga, P., Bhattacharya, P., Majumdar, N., & Mukhopadhyay, S. (2022). Muography for Inspection of Civil Structures. *Instruments*, 6(4), Article 77. doi:10.3390/instruments6040077
- (c) Das, S., Tripathy, S., Sarkar, S., Majumdar, N., & Mukhopadhyay, S. (2022). A Novel Readout Scheme for Muon Tomography Application in Material Identification. *Journal of Advanced Instrumentation in Science*, 2022. doi:10.31526/jais.2022.261
- (d) Kumar, V., Das, S., Roy, P., Bhattacharya, P., Mukhopadhyay, S., Majumdar, N., & Sarkar, S. (2023). A novel technique for measuring position resolution of Gas Electron Multipliers (GEM). *Nuclear Instruments and Methods in Physics Research Section A*, 1058, 168836. doi:10.1016/j.nima.2023.168836
- (e) Tripathy, S., Das, S., Datta, J., Majumdar, N., & Mukhopadhyay, S. (2020). Precise tracking of cosmic muons using the Time-over-Threshold property of NINO ASICs. *Journal of Instrumentation*, 15(11), C11013. doi:10.1088/1748-0221/15/11/C11013

## 11. Conference Proceedings

- (a) Das, S., Datta, J., Majumdar, N., & Mukhopadhyay, S. (2022). Numerical Evaluation of Electric Field and Dark Current of Resistive Plate Chamber. *Journal of Physics: Conference Series*, 2374(1), 012151. doi:10.1088/1742-6596/2374/1/012151
- (b) Das, S., Datta, J., Majumdar, N., & Mukhopadhyay, S. (2023). Numerical Evaluation of Resistive Plate Chamber. In R. N. Patra (Ed.), *Advanced Radiation Detector and Instrumentation in Nuclear and Particle Physics* (pp. 61–66). Springer. doi:10.1007/978-3-031-19268-5\_8
- (c) Majumdar, N., Tripathy, S., Das, S., Bhattacharya, P., Mukhopadhyay, S., & Sarkar, S. (2022). Muon tomography using cosmic-ray muons. *Journal of Physics: Conference Series*, 2349(1), 012008. doi:10.1088/1742-6596/2349/1/012008

## 12. Schools and Conferences Attended

- **June, 2022, Italy:** Attended the 12th International School of Trigger and Data Acquisition (ISOTDAQ-2022).
- **Dec, 2020, India:** Presented poster on “Development of a novel FPGA-based readout system for muon tomography” at XXIV DAE-BRNS High Energy Physics Symposium 2020.
- **May, 2021, TRIUMF:** Presented poster on “Numerical Evaluation of Electric Field and Dark Current of Resistive Plate Chamber” at International Conference on Technology and Instrumentation in Particle Physics (TIPP2021).
- **Oct, 2021, India:** Presented talk on “Numerical Evaluation of Resistive Plate Chamber” at Workshop on Advanced Radiation Detector and Instrumentation in Nuclear and Particle Physics (RAPID2021).
- **Nov, 2021, India:** Presented talk on “Numerical Studies of Electric Field and Potential Distribution of Resistive Plate Chamber” at 3rd National Conference on Frontiers in Modern Physics (NCFMP 2021).
- **Nov, 2021, Belgium:** Presented talk on “A Novel Readout Scheme for Muon Tomography Application in Material Identification” at International Workshop on Cosmic-Ray Muography (Muography2021).
- **May, 2022, USA:** Presented talk on “Application of machine learning in muon scattering tomography for better image reconstruction” at 7th International Connecting The Dots 2022 Workshop (CTD 2022).
- **Sep, 2022, CERN:** Presented talk on “RPC performance with an alternative eco-friendly gas mixture” at XVI Workshop on Resistive Plate Chambers and Related Detectors (RPC2022).
- **Feb, 2024, India:** Presented talk on “Numerical Studies of Electric Field and Potential Distribution of Resistive Plate Chamber” at 4th National Conference on Frontiers in Modern Physics (NCFMP 2024).

## 13. Awards and Achievements

- (a) Qualified *Joint Admission Test for Masters (JAM 2016)*.
- (b) Qualified *Joint CSIR-UGC National Eligibility Test (NET)* with Junior Research Fellowship (JRF), December 2016.
- (c) Qualified *Graduate Aptitude Test in Engineering (GATE 2018)*.