Applications are invited for a Research Associate (RA) position to work on a DST-SERB sponsored research project titled **"Landscape of Beyond the Standard Model Physics at Neutrino Experiments"**. This project is a part of the DST Swarnajayanti Fellowship (2019 - 2020) awarded to Prof. Sanjib Kumar Agarwalla at Institute of Physics (IOP), Bhubaneswar.

Essential and Desirable Qualifications:

The applicant must have obtained a Ph.D. degree in Physics from a recognized Institute/University with expertise in High Energy Particle Physics. In-depth knowledge on various cutting-edge research topics in Neutrino Physics will be preferable. Programming skills in C++/Root/GLoBES and a familiarity with Unix/Linux based operating systems will be added advantages. Those who are about to submit their thesis or have already submitted their thesis, but yet to obtain their Ph.D. degree, can also apply. Apart from his/her own research work, it is expected that the candidate will participate in various academic activities such as assisting young Ph.D. students of the group in their research work, arranging weekly group meetings, giving regular talks/seminars, delivering lectures on pedagogical/advanced research topics.

Fellowship and Allowances:

As per the existing guidelines issued by the DST-SERB and Institute of Physics (IOP). For details, click here. Accommodation inside the campus is subject to availability. House Rent Allowance (HRA) would be given at a permissible rate for the candidates staying outside the campus.

Duration:

Initial appointment of the RA will be for two years, extendable for one more year depending upon the performance of the candidate and available funding. The candidate is supposed to give review seminars twice in a year and progress report should be submitted every six months. The project position is co-terminus with the above project.

How to Apply:

Interested candidates should email their application **(a single merged PDF file)** latest by **15th January, 2022** to **sanjib@iopb.res.in** with the following documents:

- A complete curriculum vitae providing information about her/his academic records, research experience gained during Ph.D./Postdoc, current work, future goals, and details about any past experience related to the above project.
- A complete list of publications.

Candidates should arrange three letters of recommendation from the referees who are familiar with their research work. The referees can send their letters directly to **sanjib@iopb.res.in** latest by **20th January, 2022**.

Shortlisted candidates will be intimated by email immediately after the deadline and will be asked for a virtual interview/presentation over Skype/Google-Meet/Zoom. Candidate can join immediately after the selection. Exact joining date is negotiable.

A Brief Description of the Project :

Under this project, we plan to probe various beyond the Standard Model (BSM) scenarios at very high (TeV-PeV) energies (beyond the reach of modern colliders) by detecting astrophysical neutrinos from cosmic distances using giant neutrino telescopes such as IceCube at the South Pole, future IceCube-Gen2, and KM3NeT in the Mediterranean Sea. Another important facet of this project is to unravel various new physics models at low (MeV-GeV) energies using accelerator and atmospheric neutrinos travelling terrestrial distances.

To know about our recent research activities, follow us on our social media handles:

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