

## Indian Institute of Science Education and Research Bhopal

# Junior Research Fellow at IISER Bhopal

Applications are invited from Indian nationals for the post of "Junior Research Fellow" or "Project Associate" in the SERB sponsored project "The Neutrino Portal to Unravelling Fundamental New Physics".

## **Project description:**

More than eighty years after they were first proposed, neutrinos still remain an enigma. They are an integral part of the Standard Model of Particle Physics, still we know very little about them. The discovery of neutrino oscillations have only added more questions to the already enigmatic neutrinos. Our aim is to look into the questions surrounding neutrino oscillations and also to scrutinize and confront the various proposed solutions with experimental data. We plan to construct new models for neutrino mass generation as well as leptonic mixing. We also aim to confront the already existing models of lepton mixing and neutrino oscillation with the experimental data of various experiments. The project has both theoretical and phenomenological components and looks at various aspects of neutrino physics. The aim is to obtain a more complete understanding of the properties of neutrinos. This will help us potentially unravel the nature and characteristics of the beyond Standard Model new physics that can explain the shortcomings of the Standard Model.

### **Duration**:

Initially for 1 year

### Last date for applications: 15th Jan, 2022

(this call will remain open until suitable candidates are found)

### **Essential Qualifications:**

M.Sc. in Physics

Candidates who have qualified a National Eligibility Test (UGC, CSIR, LS, GATE, etc.) with a valid rank/score at the time of applying for this post will be eligible for the JRF position. Otherwise, the candidates will be eligible for the Project Associate position.

Candidates having experience in particle physics phenomenology, in particular on topics of neutrino physics, dark matter, proton decay, neutrinoless double beta decay are preferred. Candidates should preferably be below 28 years of age.

#### Salary:

Junior Research Fellow: Rs. 31,000 p.m. + HRA (16%) Project Associate I: Rs. 25,000 p.m. + HRA(16%)

## How to Apply:

Submit your application through this Google Form: <u>https://forms.gle/1FvbDtyGhKhq7NB56</u>

For more details and context, see the homepage of Dr. Rahul Srivastava

https://phy.iiserb.ac.in/faculty\_profile.php?id=OTk=&lname=cmFo dWw=

Incomplete application will not be considered, and no correspondence will be entertained with regard to the application status. All correspondence regarding Shortlisting and selection will only be via email.