

PWF Guidelines for Applications

The aims of PWF:

To train university students in core topics and cutting-edge research in physics and mathematics using enquiry-based learning and hands-on sessions, and teach transferable skills in computing, programming and machine learning.

To identify and mentor top students studying at universities without MSc/PhD programmes to go on to further study abroad, such as the ICTP diploma programme, or MSc and PhD placements.

To support physics and mathematics departments in universities with little or no research, by providing faculty training, taught university courses, curriculum support, research infrastructure, efforts towards the public understanding of science, and outreach to high school students and teachers.

Our volunteer network

We achieve our aims through the passion and hard work of our network of volunteer scientists who organise projects, mentor students, support departments and provide international connections and collaboration. Our volunteer scientists comprise of lecturers in universities in developing countries, lecturers, postdocs and graduate students originally from developing countries working abroad, along with scientists from non-developing countries and ICTP scientists.

The group members that run the projects automatically join the PWF volunteer network, and are invited to volunteer for future projects for their own or other participating countries.

If you do not have a project in mind but are interested to volunteer for a project you can email us with your CV, teaching and training expertise and experience so that we may get in contact if a project matches your skill set.

PWF Projects: What you might apply for

Projects to **train university students** in developing countries, proposed by lecturers, postdocs or graduate students:

- PWF online hands-on training or courses in physics and mathematics, or online outreach programmes.
- PWF roadshows, university courses, or schools in physics and mathematics when travel restrictions are lifted.

Projects to support **lecturers and physics and mathematics departments** in developing countries

- Lecturers looking for support to teach a course in physics or mathematics.
- Lecturers looking for support to develop their BSc or MSc curricula in physics and mathematics.

Projects proposed by lecturers, postdocs or graduate students wishing to organise **communication** or **outreach** projects designed to support **diversity** in physics and mathematics, in particular to address the gender gap in STEM.

Application process

Stage 1: Initial application

This stage is designed to allow you to outline your motivation, define the issue you would like to address and put forward any ideas you have for the project. The person making the application should be the project coordinator, and if you have group members working on the project you may give their names and affiliations. Any connection to ICTP should be stated.

We encourage partnering with universities or labs, local industry, educational projects or any other useful partnerships. Applications at this stage are not obliged to have already established partners, and if this is the case the corresponding section in the application can be left blank.

You will receive a response to your application as to whether your project is selected to progress to Stage 2

Stage 2: Full proposal

We will work with selected projects to develop a full proposal with complete details, clear objectives and evaluation procedures, dates, and agreed budget. The group members and additional volunteers will be agreed, along with the project partners, project structure and deliverables.

The full proposal must then be approved by all partners involved including ICTP before going ahead.

Budget

PWF is not a funding body, instead we organise projects and empower passionate scientists to share their knowledge and develop collaborations with universities and

mentor students. We partner with the local universities, industry or other partners to provide travel grants and other forms of support towards the project.

For approved projects the ICTP can either provide a prepaid ticket or a grant to cover travel expenses and other relevant project costs. Accommodation and other local costs are expected to be covered by the partnering universities. Subsistence is not usually provided.

In the application you should give the details of the travel each volunteer will take, if known, and the estimated cost of the ticket. Any other costs should be clearly outlined, and if you have funding from your university or project partner.