



Physics Without Frontiers

Worldwide physics outreach

BUILDING THE NEXT GENERATION OF PHYSICISTS

INSPIRE & MOTIVATE

We work to **inspire** physics and maths undergraduate and masters students in developing countries with cutting-edge **research**, to **motivate** them to continue their studies and to consider pursuing a career in research.



Each project is **unique**, developed with the country's specific needs in mind.



Projects are organised by a small working group of PhD students and postdocs passionate about promoting physics in their home country.



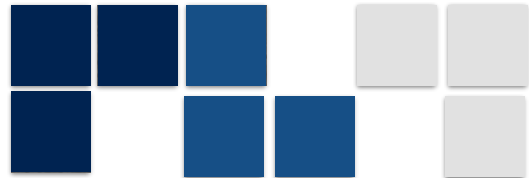
Careers and opportunities sessions provide students information and advice for further study.



Hands-on sessions enable students to analyse real data and discuss the results with physicists working in that field.

TRAIN & EDUCATE

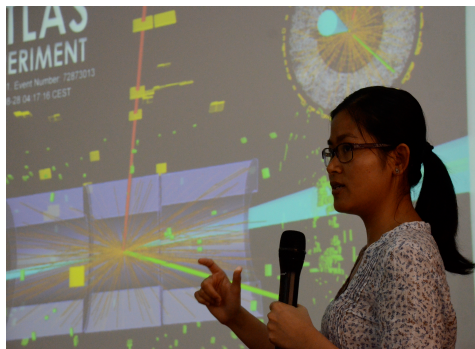
Intensive one-day physics **masterclasses** are organised with all of a country's university physics departments to **train and educate** each and every student, exposing them to cutting-edge research.



COMMUNITY OUTREACH



Outreach activities with high schools and children homes work to **engage** and **excite** young people with physics.



Events are organised to engage the public, media and policy makers to promote the importance of investing in physics education and research.

NETWORK & COLLABORATE



Opportunities for discussion can sow the seeds for **collaboration** and future projects.

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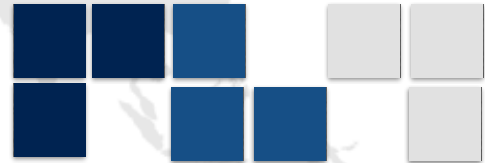
Particle Physics course taught at Birzeit University, Palestine annually since 2013 by high energy physicist Bobby Acharya



Lectures are delivered remotely together with a postdoctoral teaching assistant stationed at the university

REMOTE COURSES

We offer high-level courses in physics and mathematics to be taught remotely to universities in developing countries, providing students with otherwise inaccessible education. These courses often support students' applications for further study.



STUDENT SUPPORT

By building and training the next generation of physicists we provide role models to motivate students with further studies, and provide mentoring to support them throughout their early careers.

Students that do go on to further study often then join the Physics Without Frontiers team, and continue the cycle to promote physics in their home countries!



OUTCOMES

- Over 850 students have been involved in the programs to date
- Many students from the program are now abroad studying masters and PhDs
- Students have created outreach groups of their own, inspired by the project, to reach out to schools and the public
- Numerous research collaborations, further training programs, and even infrastructure projects such as providing computer facilities are initiated from the programs and working group members



For more information: email kshaw@ictp.it

Visit: www.ictp.it/programmes/outreach-activities/physics-without-frontiers.asp

