

Contribution ID: 791

Type: Poster Presentation

EEE Project - Students from all parts of peninsula collaborate to study cosmic rays

Project Extreme Energy Events (EEE) –"La scienza nelle scuole"is an experiment dedicated to the study of high energy cosmic radiation, using detectors distributed over an area of more than half a million km2, from Geneva to Lampedusa. Data are taken simultaneously from about 40 telescopes. More than 40 billion particles have been registered up to now.

Project was born in 2004 from an idea of Professor Antonino Zichichi, funded and operated by the Fermi Center in Rome in collaboration with CERN, INFN, and the Ministry of Education, with the aim to involve high school students in a real physics experiment. The Initiative has reached the goal of 100 participating educational institutes, with a support of 20-30 students per school. Half of these already hosts a detector, the others, waiting for a telescope, are involved in data taking and analysis together with twinned schools.

The participation of students starts with the construction of the detectors at CERN, working with local researchers. After installation into school, they manage and monitor the operation of the telescope during the data taking, and intervene in case of failure.

Students deepen their knowledge both about particle physics through targeted lessons and in specific areas of data analysis with dedicated "master classes". Periodically they attend seminars, open also to the citizens and sometime highlighted in newspapers, and to annual meetings between all schools involved and the Centro Fermi researchers coordinating the project.

Since November 2016, there are monthly videoconferences opened to schools; more than 50 schools are connected simultaneously! In these meetings, students are updated on the latest news of the project and present their activities to the entire collaboration.

In my presentation, I will examine the different ways of involvement of young people in the project and its impact on education and citizenship.

Experimental Collaboration

EEE Project

Author: Dr GRAZZI, Stefano (Centro Studie e Ricerche "Enrico Fermi")

Presenter: Dr GRAZZI, Stefano (Centro Studie e Ricerche "Enrico Fermi")

Session Classification: Poster session

Track Classification: Outreach, Education, and Diversity