

“A scuola di Astroparticelle”: a synergy between school education and scientific research

Roberta Colalillo^{a,b} and Carla Aramo^a for the OCRA Collaboration

^a INFN, Sezione di Napoli, Via Cintia, Italy

^b Università degli Studi di Napoli “Federico II”, Dipartimento di Fisica “E. Pancini”, Italy

What is this contribution about?

“A scuola di Astroparticelle” is an outreach program born in 2016 with the idea to engage teachers and students of High Schools in astroparticle physics projects.

It is part of OCRA - Outreach Cosmic Ray Activities - a national outreach project of INFN which collects local outreach activities in cosmic-ray field, and it is also part of the Italian Educational Program PCTO – “Percorsi per le Competenze Trasversali e per l’Orientamento”.

Why is it relevant/interesting?

Students approach to the world of research and learn to interact and work with others, to solve problems, to build and carry out a research activity, to present their work.

What has been done?

Many schools and students have been involved in this project. For the third edition (2018/19), more than 600 students attended the final event and presented their work to a jury with a poster and an oral presentation in plenary sessions.

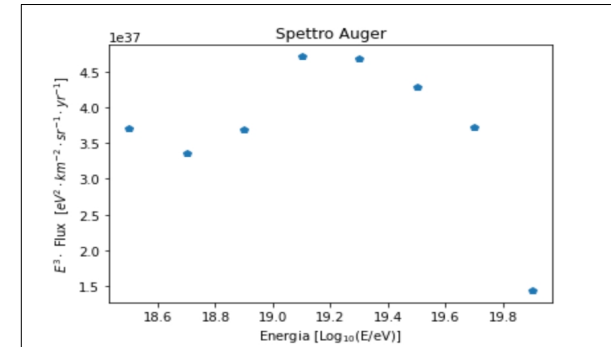
The COVID-19 pandemic didn’t stop this project. A fruitful experience for tutors and students was carried out in online mode.

What is the result?

We tested that “A scuola di Astroparticelle” is a valid tool for school and personal growth of young students. In the next years, we will continue to propose this project as PCTO and to expand the available research paths.



Students, teachers and tutors in Zoom connection during the final event of the special fourth online edition.



The energy spectrum of the high-energy cosmic rays constructed by students using the public data of the Pierre Auger Observatory.