Beamline for Schools 2022
A Physics Competition for High-school Students

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Teacher and Student Forum,
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Goal: bringing young people from all over the world close to the fundamental research in particle physics. Learning by doing.

In 2022 the competition came back to CERN but the collaboration with DESY, started in 2018, continues.

DESY hosts an extra winning team
Competition Overview

304 proposals from Teams representing 71 countries!
An opportunity for all the participants

2123 students took part in the competition (59% m, 41% f) but only a tiny fraction will come to CERN. Providing constant support and extra-curricular opportunities to most of them is crucial!

- We organized 9 online events (almost one per month) including: a meeting between perspective participants and former winners), Virtual Visits of CERN facilities, a Q&A session on the Higgs Discovery (July 4) with Prof. Philip Clark and Dr. Frederik VAN DER VEKEN and a seminar on the James Webb Telescope given by Prof. Ewine Fleur van Dishoeck from the Leiden Observatory.
Winners

- 3 winning teams, 2 hosted at CERN and 1 at DESY
- 21 teams have been shortlisted and one got a prize for the best video, they will receive t-shirts, BL4S USB keys, DIY particle detectors.
- 6 teams got an award for the best outreach proposal, news in 2022!

The teams were invited to suggest an outreach activity to share with their communities what they learnt through the participation in BL4S.

Have a look!
Supercooling Team

Ecole du Sacré Coeur, Reims, France.

Goal: Using water in the supercooling phase to detect particles.
Fermi Team

Club de Fisica Enrico Fermi, Vigo, Spain

**Goal**: Correlate the mass of particles with the charge deposited in MRPCs (Multi-resistive Plate Chambers).
Fermi Team

EISewedy Technology Academy, Cairo, Egypt

**Goal**: Study the efficiency of MRPCs (Multi-resistive Plate Chambers) using environmentally friendly (low GWP) gas mixtures.
Beamtime at CERN and DESY

Between Wednesday September 21 and October 4 the teams are at CERN and DESY
Next Edition

We will open the registration to BL4S 2023 soon!

The format should be the same: two teams at CERN and one at DESY.

Don’t hesitate to share the information:

cern.ch/bl4s
To conclude: HSSIP finished in 2022

Italy - Spring 2022

Serbia - Spring 2022

Thanks a lot for your support!