



Run your own experiment at a real particle accelerator!

The Beamline for Schools (BL4S) competition, organised by **CERN, DESY and ELSA**, gives high-school students from all over the world the chance to design and carry out a real physics experiment at a particle accelerator.

Teams of at least five students and a coach (teacher) can submit their idea – the winning teams will **travel to CERN, DESY or the University of Bonn (ELSA) to make their experiment a reality!**

About the competition

Who can join?

Any team of at least five high-school students and one adult coach can participate. Teams may come from one or several schools, even from different countries. Up to nine students and two coaches per winning team will be invited – with travel, accommodation, and meals fully covered.

What kind of experiment?

Your team can propose any experiment that uses the particle beams available in BL4S. **No prior knowledge of physics or detectors is required – just curiosity, creativity and the motivation to learn something new.** Your idea should be safe and technically feasible. Guidance documents and regional contacts are available to help you. Past winners have explored the inside of pyramids, searched for new particles properties, and even built their own detectors. What will you do?

Submissions

Submission deadlines take place each year in the spring. Please refer to our website for details. Results are announced between spring and summer.



www.cern.ch/bl4s

Guidelines



Written Proposal

Up to 1000 words explaining your motivation, your experiment idea, and how you will use the particle beam. You may include simple diagrams or pictures.



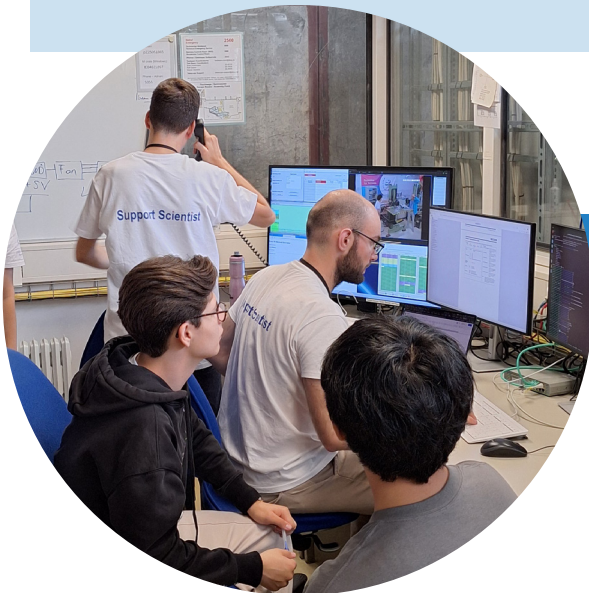
Who writes it?

Students create the proposal; they are allowed to seek the advice and help of experts. Winning teams later refine their idea with scientists.



Optional

1-minute video, 200-word outreach activity



Support

You are not alone! Regional contacts in many countries are standing ready to answer your questions and to help you in the development of your proposal.

For more information, visit cern.ch/bl4s, browse our **FAQs**, watch our introduction video, or use the **Contact Us form** on the website.

Prizes



Winning teams:

Trip of around 2 weeks to CERN, DESY or the University of Bonn (ELSA) to carry out your experiment with full cost covered by BL4S



Shortlisted teams:

Each team member will receive very cool prizes



Outreach prize:

Optical telescopes for organising a science outreach event in your community



All teams:

Teams with a valid proposal receive a BL4S certificate to acknowledge their participation

BL4S is funded through philanthropic donations.
You can contribute through the **CERN and Society Foundation!**

