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Cascade projects competition - a way to build on Masterclass success

International Particle Physics Masterclasses

- one day of particle physics for high school students at universities around the world
- 42 countries, ~ 200 institutes, 10 000 students



How can we capitalize on this success?

- lectures?
- research projects?



Cascade projects?



University of Birmingham Cascade projects (Pete Watkins)





Teams of 3-6 high school students make 20 min presentations in their own schools

Presentations are on topics from particle physics and cosmology

Teams then send videos of their presentations plus .ppt files to organizers

Jury selects best teams based on physics content (50%) and quality of presentation (50%)

Grand Final can be organized/best teams win trip to CERN



Teams cascade information on exciting ideas to many

other students:

Slovakia 15-18 teams/year: ~ 50 students → 500 (audience)

Cascade projects

Cascade is an efficient and enjoyable way to inform and engage many students with Particle Physics.

Teams enhance their own knowledge and communication skills

About 40% of participants are girls.

The competition is easy to organize!

Winning projects have a solid scientific content and are great fun...for the participants & the audience!

Team members are often interested in pursuing a physics career





