Playing with Protons UK CPD Course, 30 Jul – 04 Aug 2018

Playing with Protons for a wonder-full primary classroom

Angelos Alexopoulos (CERN)

Why?

“Children naturally enjoy observing and thinking about nature.” (Eshach & Fried, 2005, p. 315)

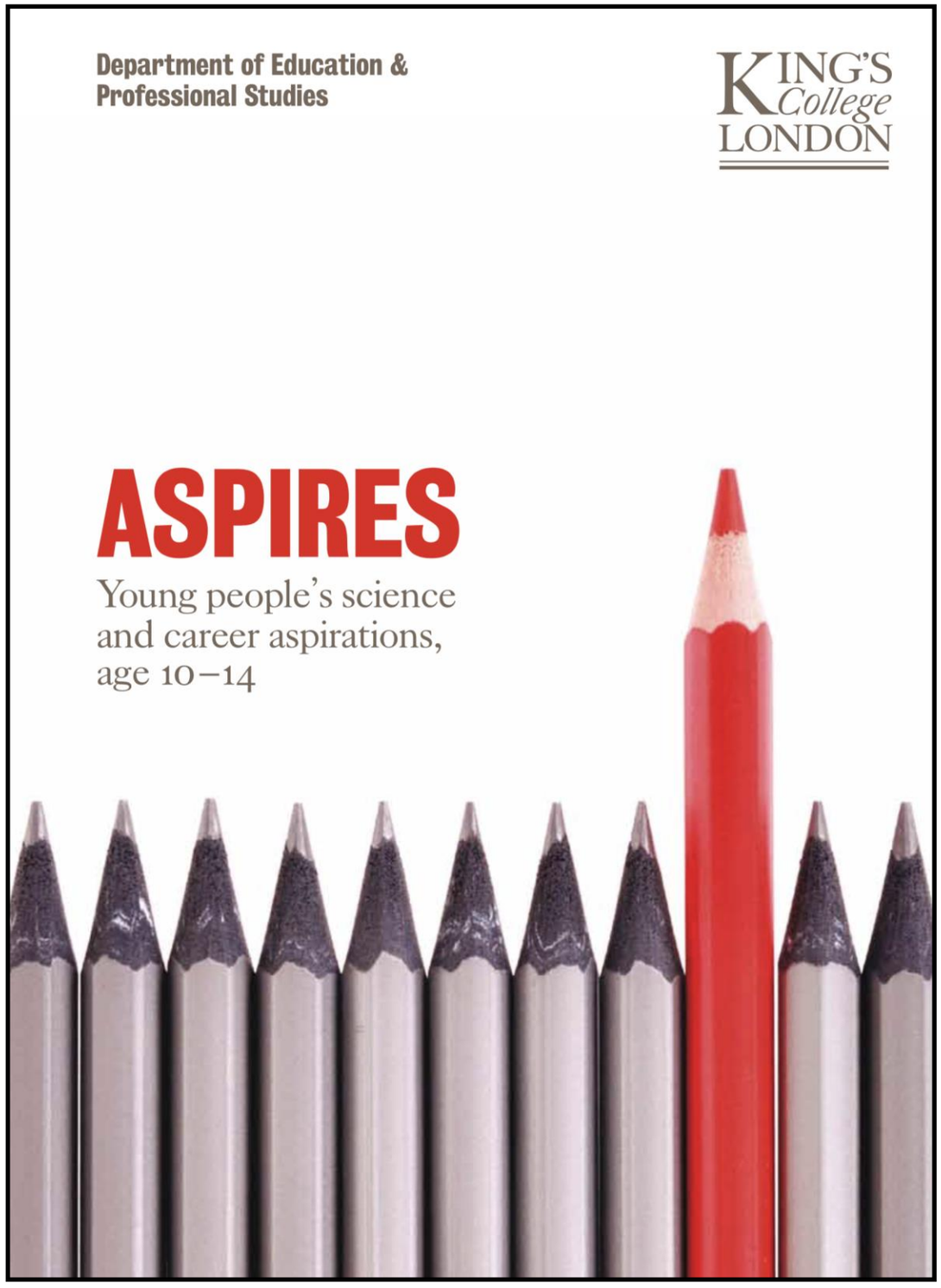
“It is, therefore, incumbent on the science educator to provide children with environments, materials, and activities, to develop their scientific reasoning while these ‘windows of opportunity’ are still open.” (ibid., p. 334)

Playing with Protons workshop at the National Observatory of Athens, Greece

Why?

“Action needs to begin at primary school - age 14 is too late.”

“Efforts to broaden students’ aspirations, particularly in relation to STEM, need to begin in primary school. Currently most activities and interventions are targeted at secondary school students.”



Primary Teacher Professional Development at CERN

Experience the unique culture of cutting-edge science, technology and innovation at the world's largest particle physics laboratory.

Try out new learning activities, especially hands-on experiments with everyday materials, to increase student interest, motivation and wonder.

Utilize creative methodologies to develop educational scenarios and lesson plans for enhancing primary physics teaching and learning.

Get inspired and motivated to share newly acquired knowledge and wonder-full experience with peers, parents and the local community.

What, Where, When

Playing with protons in primary

by Angelos Alexopoulos

PLAYING WITH PROTONS

CPD COURSES
COMMUNITIES & RESOURCES
SCHOOL INITIATIVES

COMMUNITY 26.09.2016

Greek teachers learn ABCs of particle physics at CERN

SAKIS IOANNIDIS

CMS AND CERN INSPIRE UK PRIMARY-SCHOOL TEACHERS TO PLAY WITH PROTONS

ΣΧΟΛΗ ΧΙΛΛ
ΑΘΗΝΑ
1831

CREATIONS
Developing an Engaging Science Classroom

2013 — 2014 — 2015 — 2016 — 2017

Πειράματα Φυσικής
με Απλά Υλικά

2016: 1st Greek Teacher PD course at CERN

1st Greek Teacher PD at CERN: Feedback

1st Greek Teacher PD at CERN: Publicity


COMMUNITY 26.09.2016

Greek teachers learn ABCs of particle physics at CERN

SAKIS IOANNIDIS

[Enri Canaj]

Education

GENEVA - The three wo
back of a T-shirt worn by
physicists at the Europe

ΤΡΑΠΕΖΑ ΠΕΙΡΑΙΩΣ

Η ΚΑΘΗΜΕΡΙΝΗ

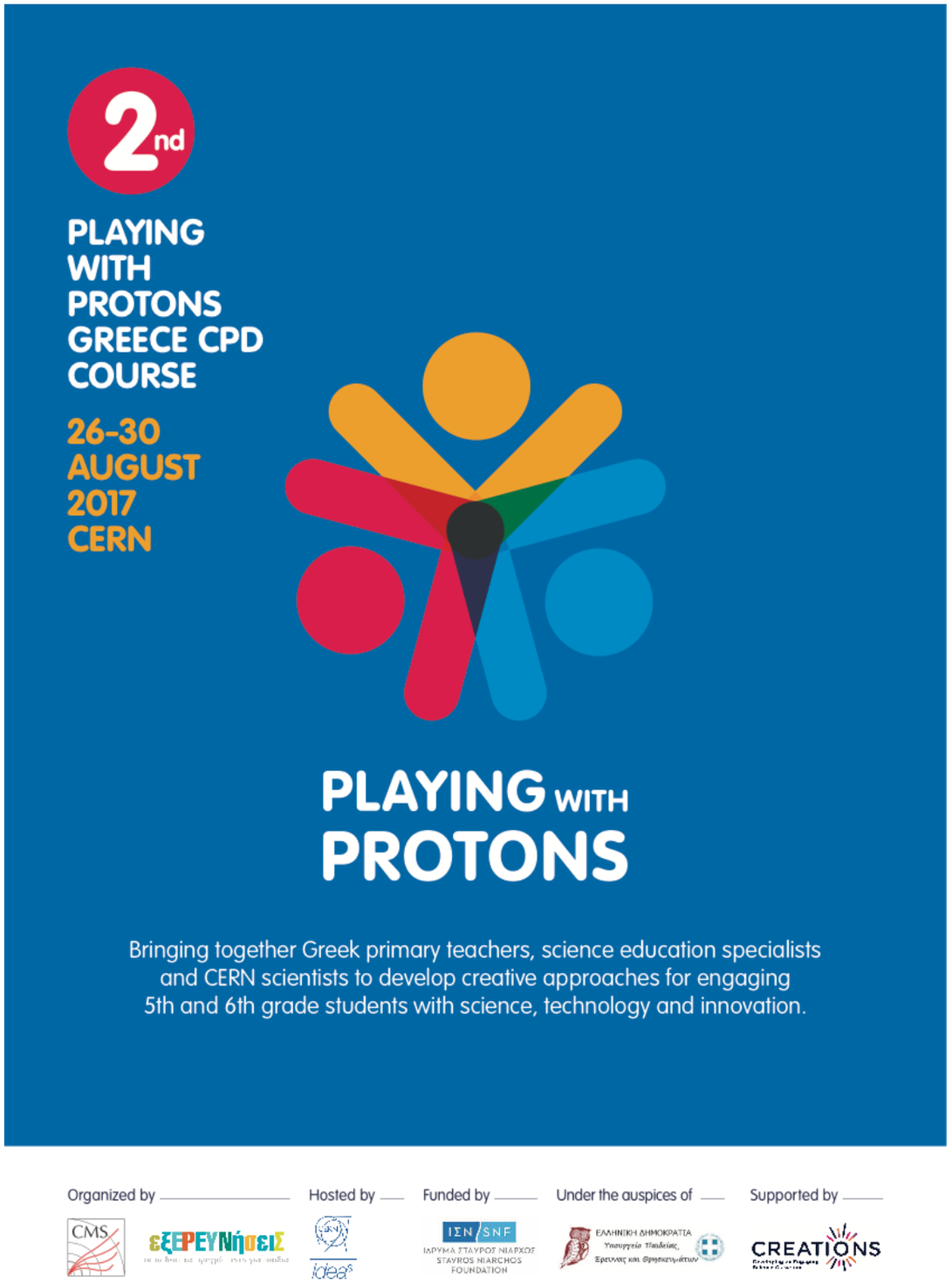
τέχνες & γράμματα

ΠΟΛΙΤΙΣΤΙΚΟ ΙΔΡΥΜΑ ΟΜΙΛΟΥ ΠΕΙΡΑΙΩΣ

«Παίζοντας» με σωματίδια στο CERN

Η «Κ» ακολούθησε τους Ελληνες δασκάλους που συμμετείχαν σε πρόγραμμα επιμόρφωσης στο διάσημο ερευνητικό κέντρο

2017: Continuation and Expansion to UK



Our UK Ambassadors*

*UK teachers trained at CERN. We have more ambassadors/members – see next slide!

Footprint*

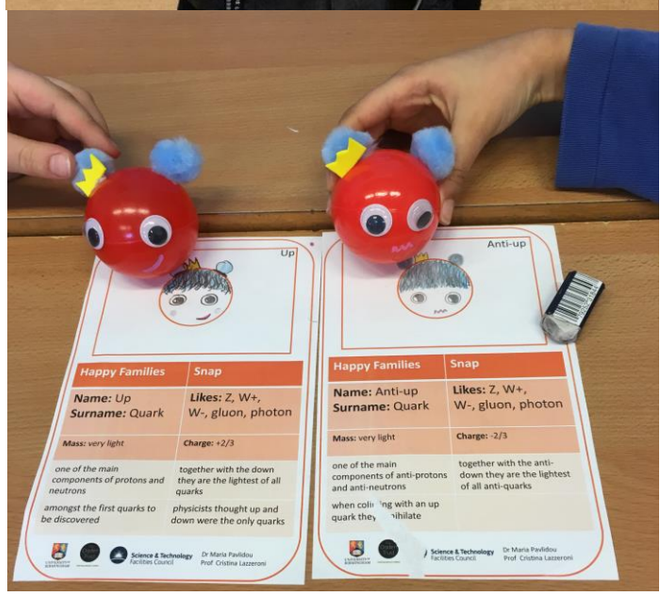
2 countries

3 CPD courses

50+ schools 150+ teachers

~4,000 students

*Up to 01 Aug 2018

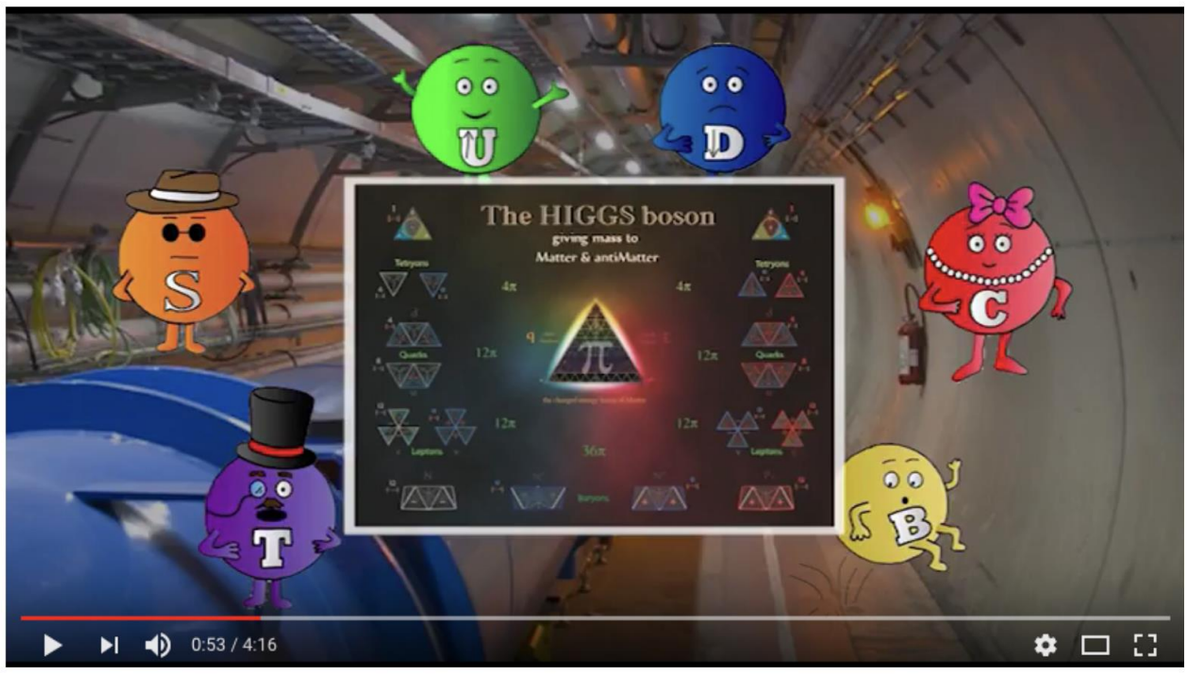


Distinctions

Particles4U (IPPOG)

Primary School (Age 12 and under) Winners

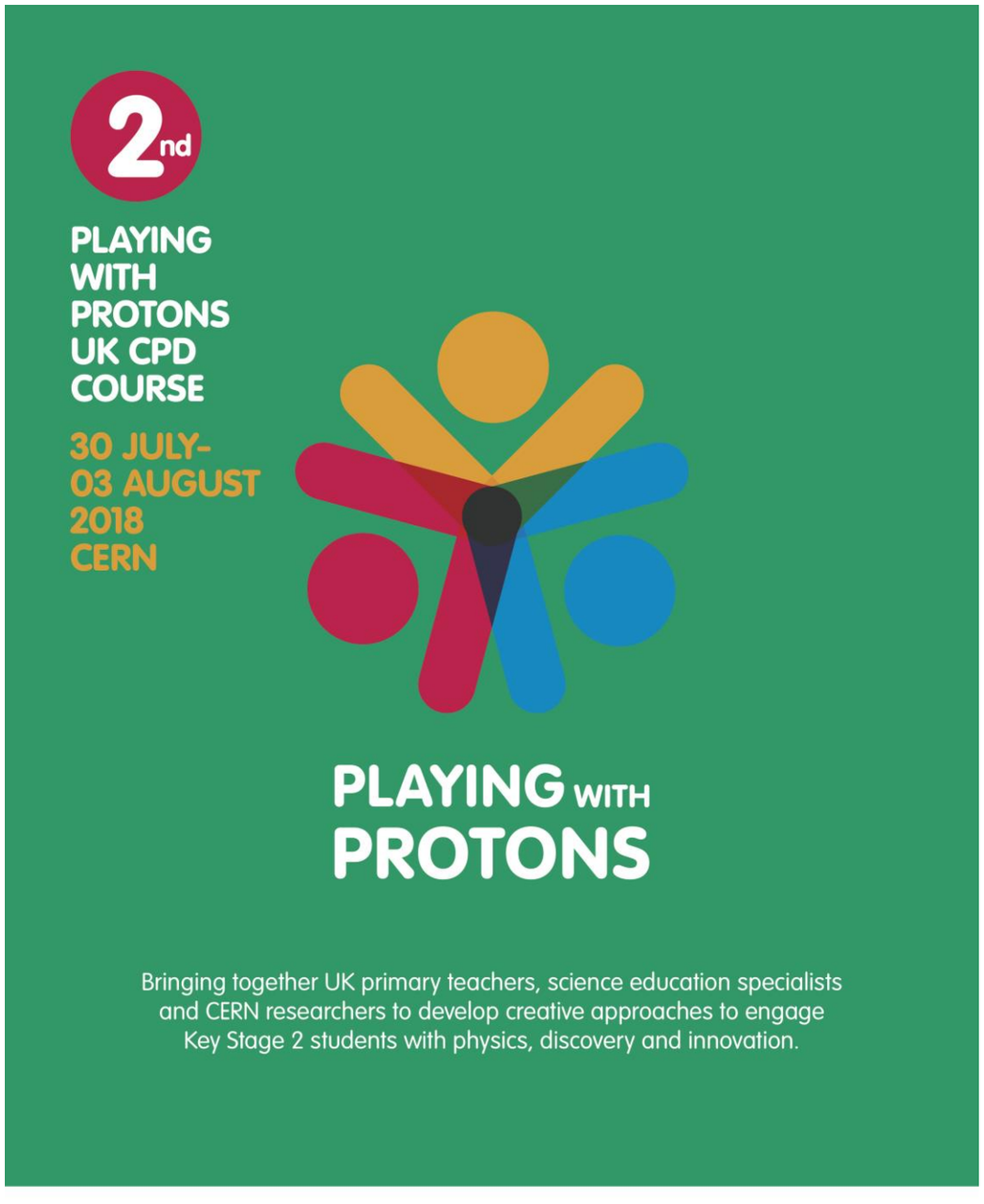
2nd and 6th Primary Schools of Artemida, Athens, Greece



Students from the 2nd and 6th primary schools of **Artemida**, a region near **Athens**, **Greece** combined particle physics with humor and to imagine a dialogue among particles. Thier video is called "**The Quark Show.**"

Looking…Up! (IAU OAD)

Moving on!


2nd
PLAYING WITH PROTONS UK CPD COURSE
30 JULY-03 AUGUST 2018 CERN
PLAYING WITH PROTONS
Bringing together UK primary teachers, science education specialists and CERN researchers to develop creative approaches to engage Key Stage 2 students with physics, discovery and innovation.
Organized by
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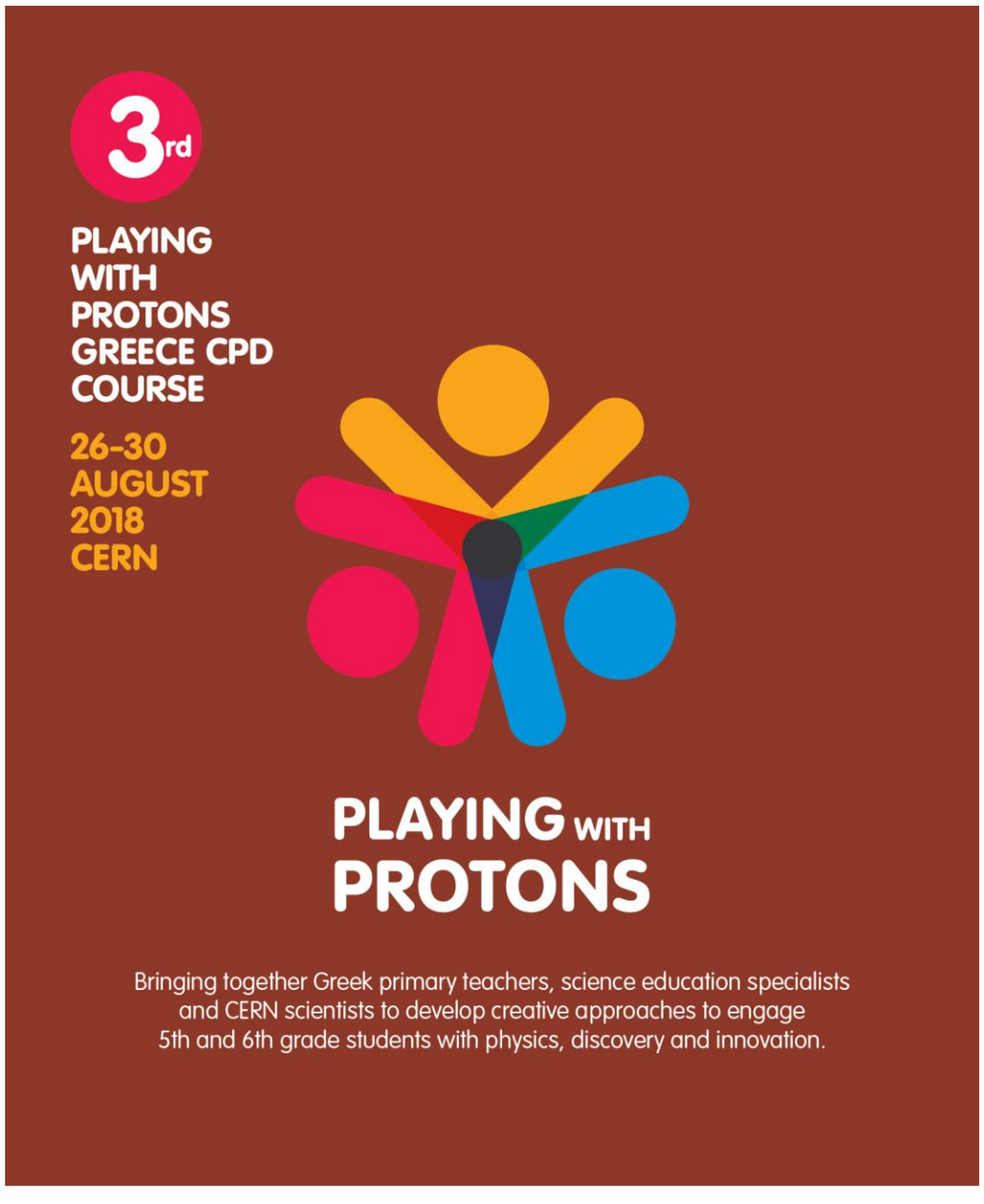
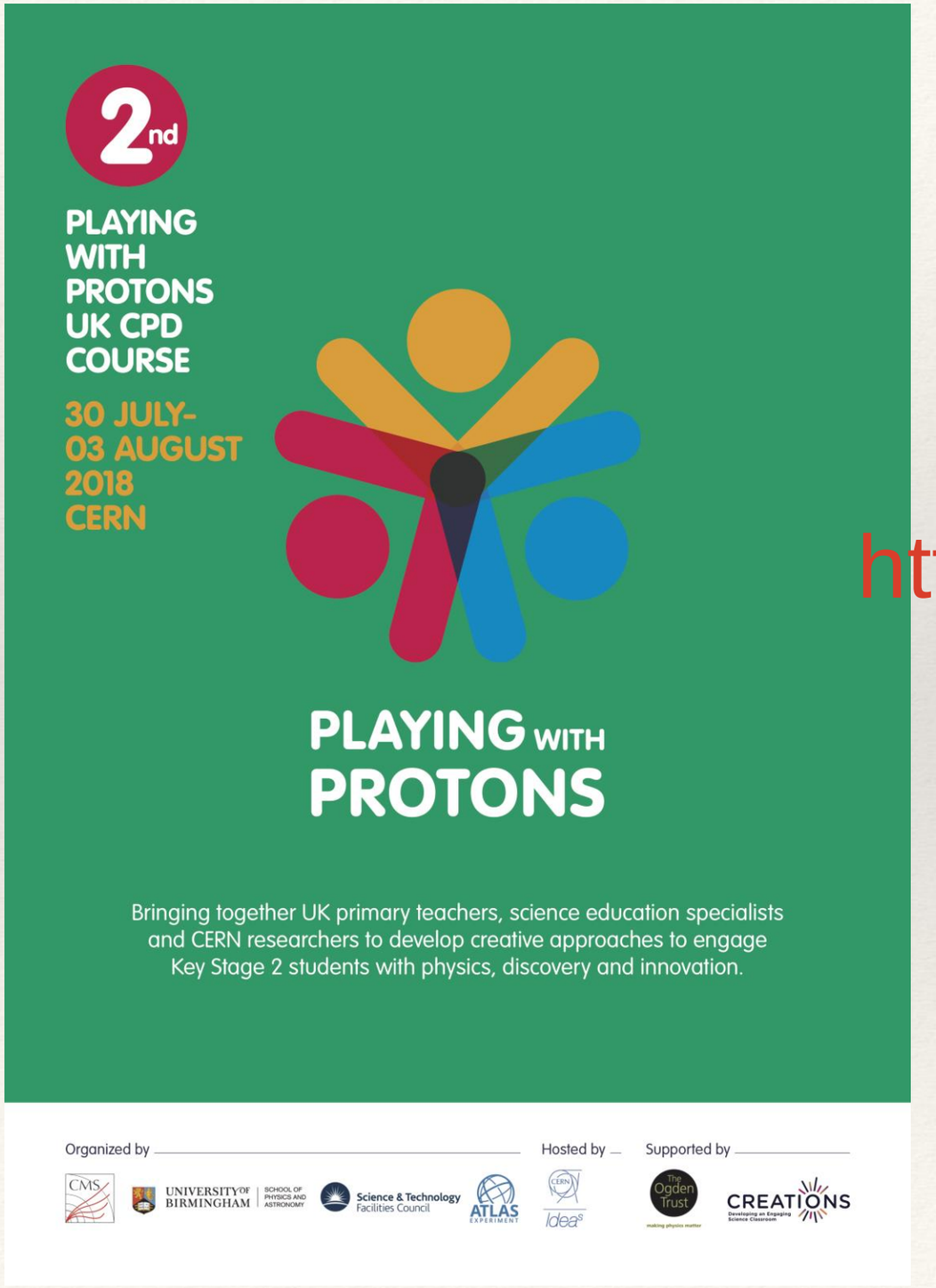
Supported by


3rd
PLAYING WITH PROTONS GREECE CPD COURSE
26-30 AUGUST 2018 CERN
PLAYING WITH PROTONS
Bringing together Greek primary teachers, science education specialists and CERN scientists to develop creative approaches to engage 5th and 6th grade students with physics, discovery and innovation.
Organized by
Hosted by
Approved by
Supported by

Let’s go!



@playprotons

https://playprotons.web.cern.ch