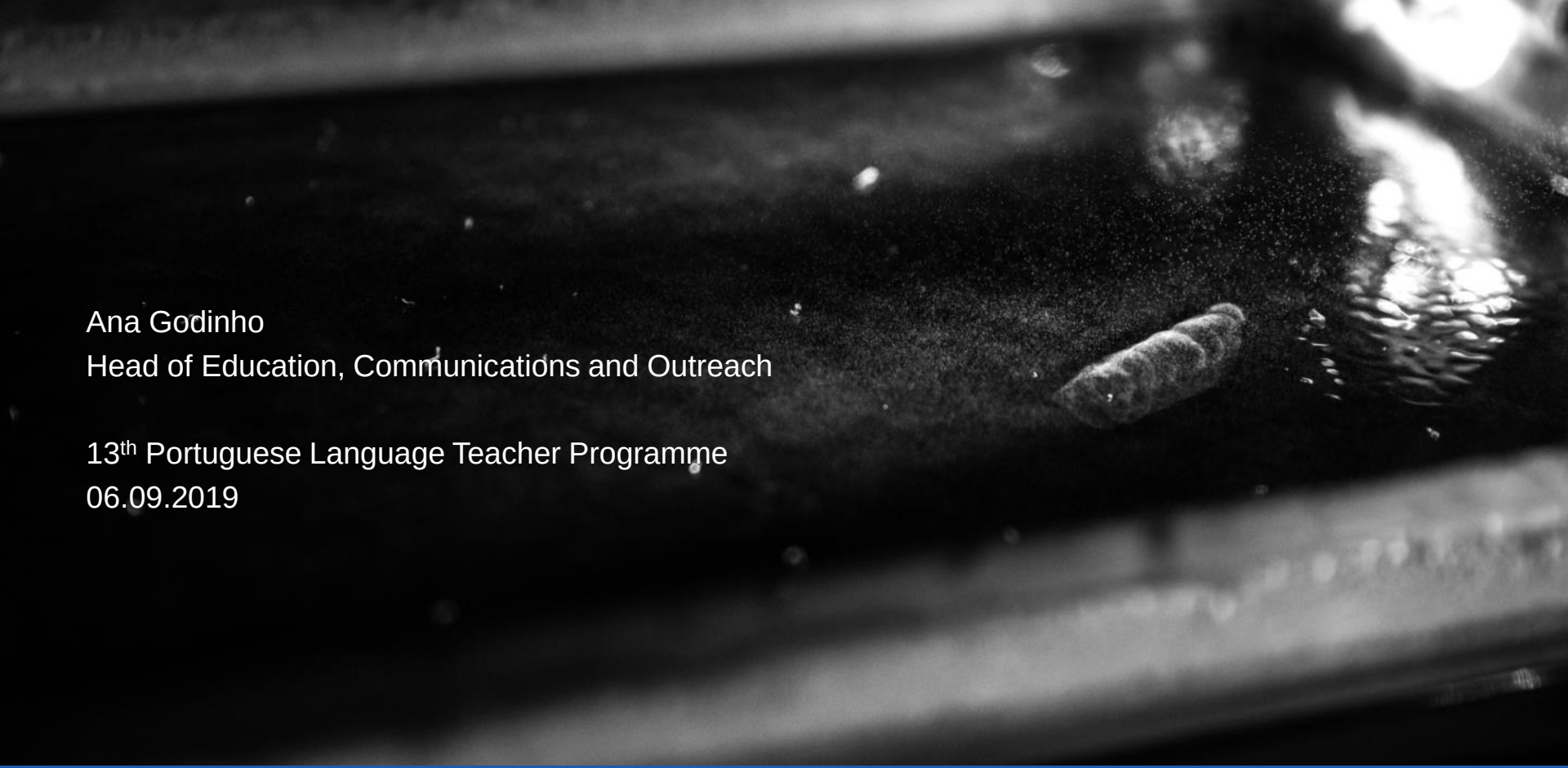
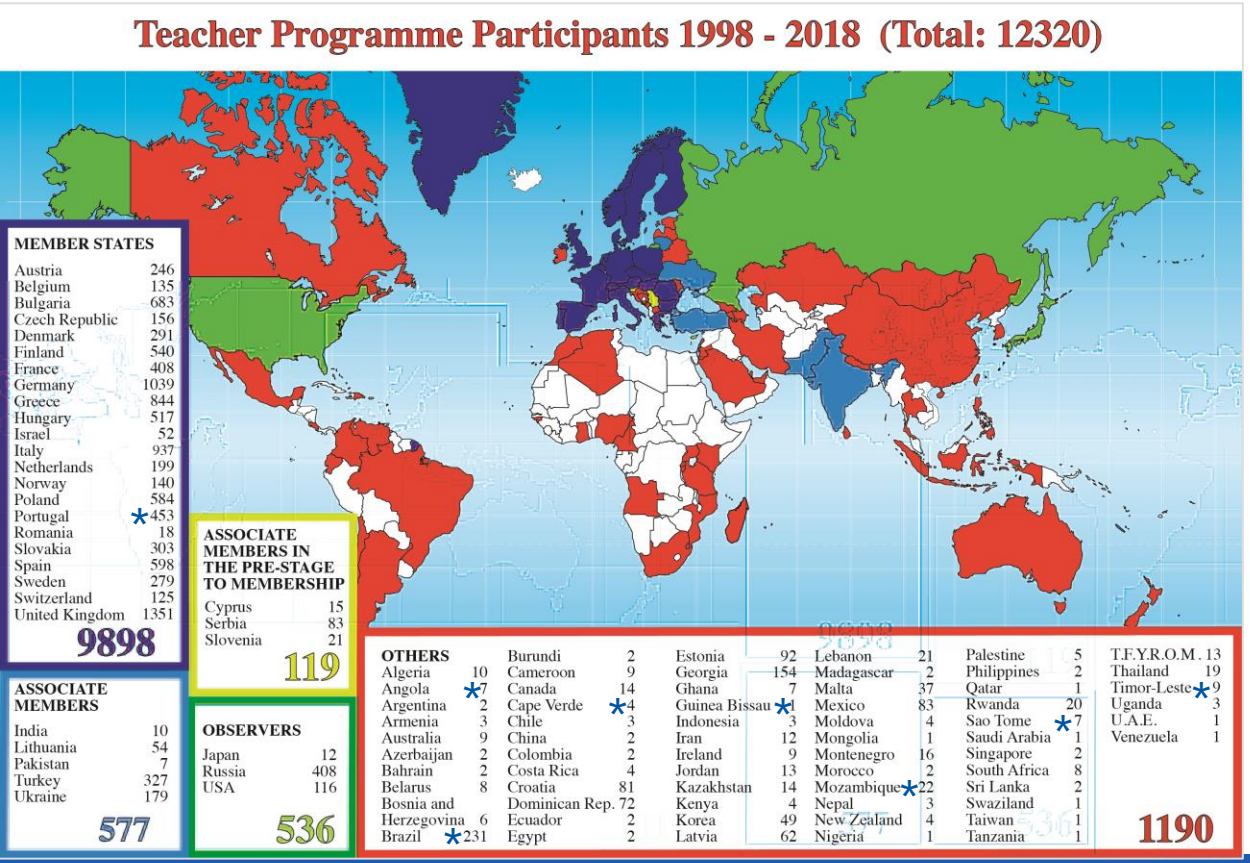


Ana Godinho
Head of Education, Communications and Outreach

13th Portuguese Language Teacher Programme
06.09.2019

”There is nothing more enriching and gratifying than learning”
Fabiola Gianotti, CERN Director-General

CERN Teacher Programmes



- **National Teacher Programmes**
  - Circa 33 / year
  - Approx. 1 000 teachers / year
- **International Teacher Programmes**
  - 2 / year
  - Almost 90 teachers / year from approx. 40 countries

734 PT language teachers

CERN High-school student programmes

S'Cool LAB

Hands-on and minds-on particle physics experiments

Full-day programme

- Guided tours of CERN
- Hands-on particle physics experiments & CERN tours
- Online tours before the visit
- For groups of high school students aged 16-19

90-minute hands-on cloud chamber workshop

- For high school students aged 14 and above
- For teachers

https://scool.web.cern.ch/classroom-activities

S'Cool LAB Workshops | Classroom Activities | S'Cool LAB Summer CAMP | Our Team | For CERNies

- Cloud Chamber
- ATLAS Magnet Model
- Bubble Chamber
- Quadrupole Ion Trap
- Quark Puzzle
- Particle Physics Games
- Mystery Box
- Scattering Experiment

sroom Activities

Below you will find some ideas … le physics in your classroom in a hands-on way. If you visit us in S'Cool LAB, you can have a look at all the listed eq… inted copy of our tour guide "A hands-on tour through particle physics on a small budget".

Cloud Chamber

https://scool.web.cern.ch/classroom-activities

The **cloud chamber** was one of the first particle detectors. Today, cloud chambers are only used in education. It is very

Beamline for Schools competition

- For teams of high-school students (aged 16 and over)
- Propose research project using CERN beamline
- Since 2014
  - 1114 teams from 84 countries; almost 10 000 students
    - 24 from Portugal
- 2 winning teams each year
  - Greece, Netherlands (2x), South Africa, Italy (2x), Poland, UK, Canada, Philippines, India, USA
- In 2019 – at DESY

High-School Student Internship Programme (HSSIP)

- 4/5 Member States / year
  - Portugal in 2017 (first year)
- Up to 24 high-school students; 16+
- 2 accompanying teachers
- 1 national and one CERN coordinator; 12 supervisors
- 2 weeks to develop a project

Visit CERN

- Close to 150 000 visitors / year
- Guides are CERN researchers, engineers and staff
- Add a cloud chamber workshop to your confirmed half-day visit! Request via S'Cool LAB website!

CERN Visit Points

- 8 in total
- Mix of real objects with touch screens and animations

Two exhibitions on-site

- Universe of Particles & Microcosm
- Free entry; open six days a week
- Close to 100 000 visitors a year

CERN
INTERACTIVE
TUNNEL

Build your own exhibition

CERN 60 > Multimedia > CERN exhibitions content

http://cern60.web.cern.ch/en/cern-exhibitions-content

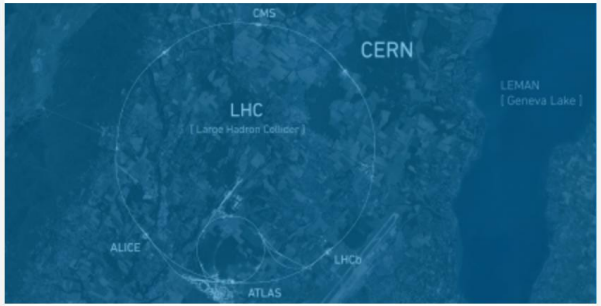
CERN60 RESOURCES

CERN EXHIBITION CONTENTS

- Overview
- Physics
- LHC Accelerators
- Experiments
- Computing
- Knowledge Transfer
- History

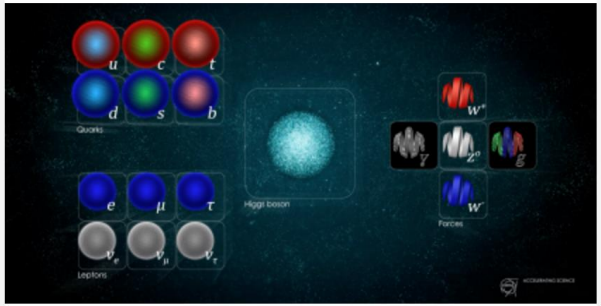
CERN exhibitions content

Overview



VIEW CONTENT >

Physics



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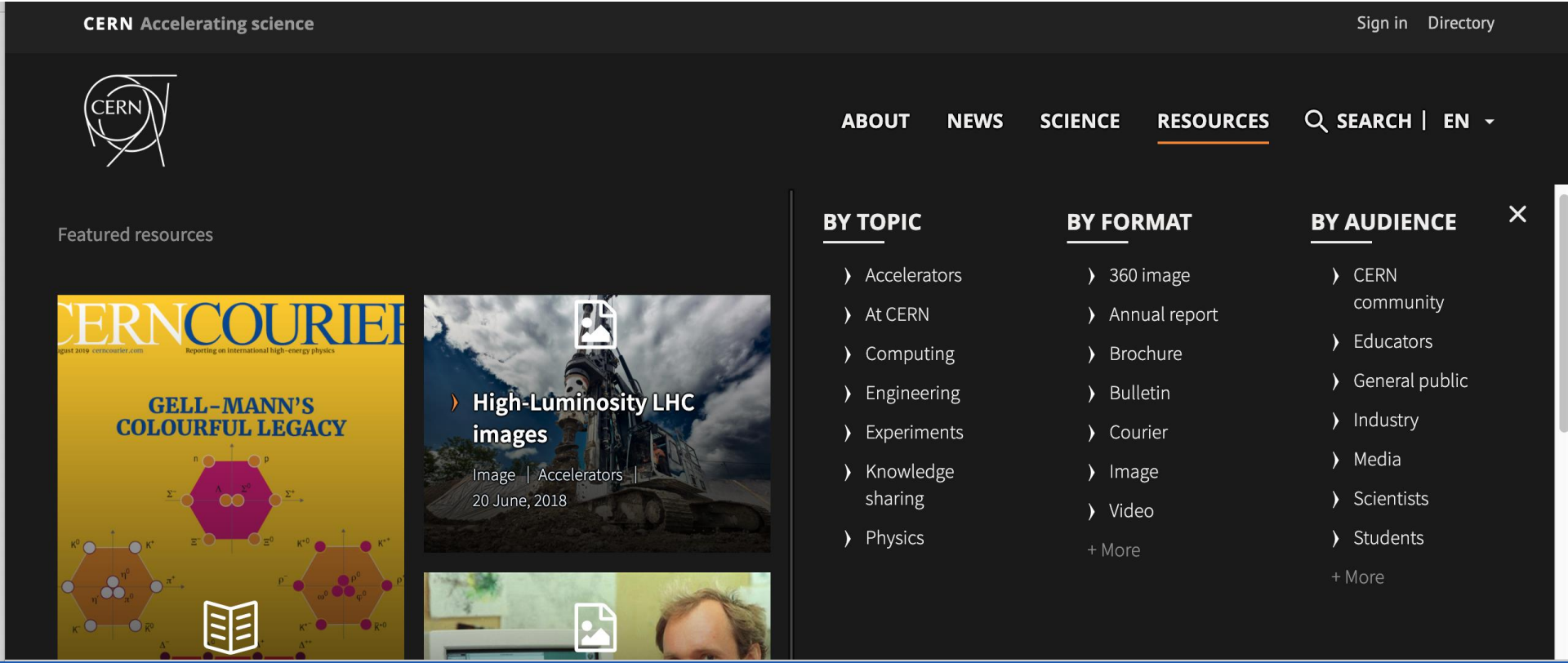
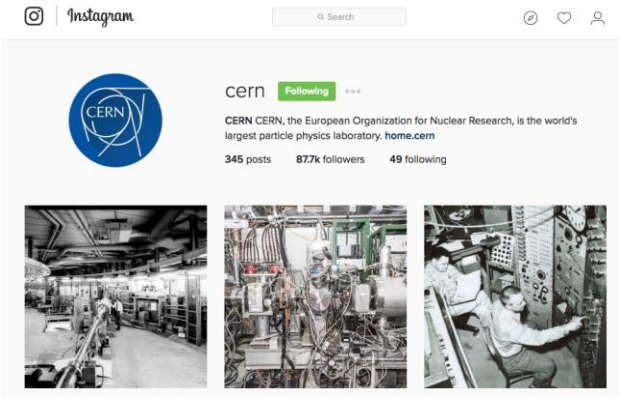
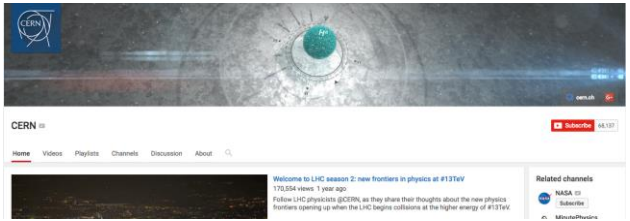
https://home.cern/



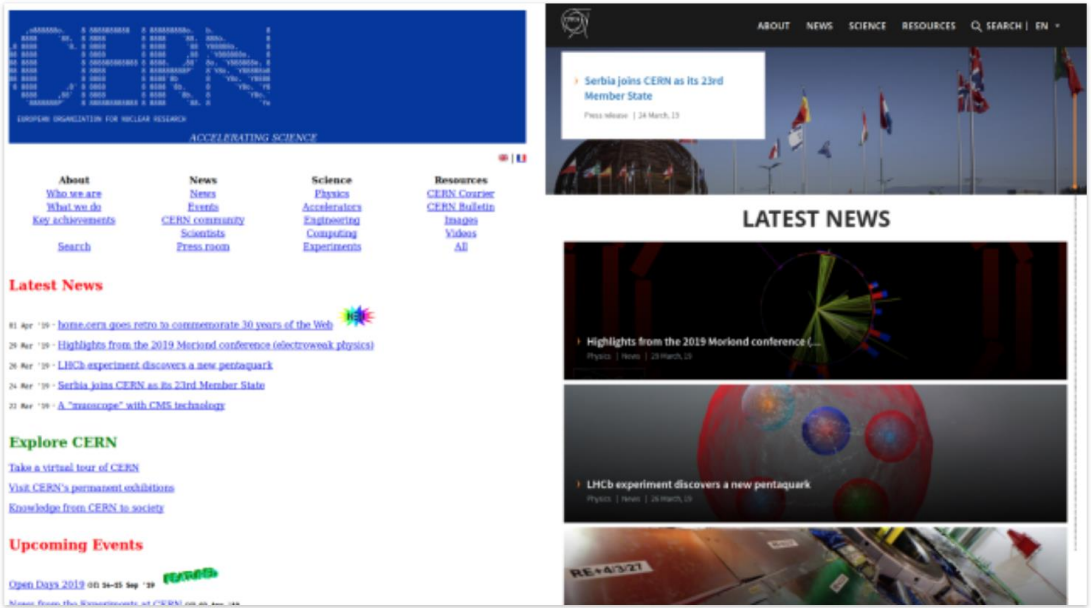
Videos and animations

Harnessing the power of social media





Fun stories



The new look of home.cern (left) and its previous incarnation (right) (Image: CERN)

1 April 2019 (April Fool)

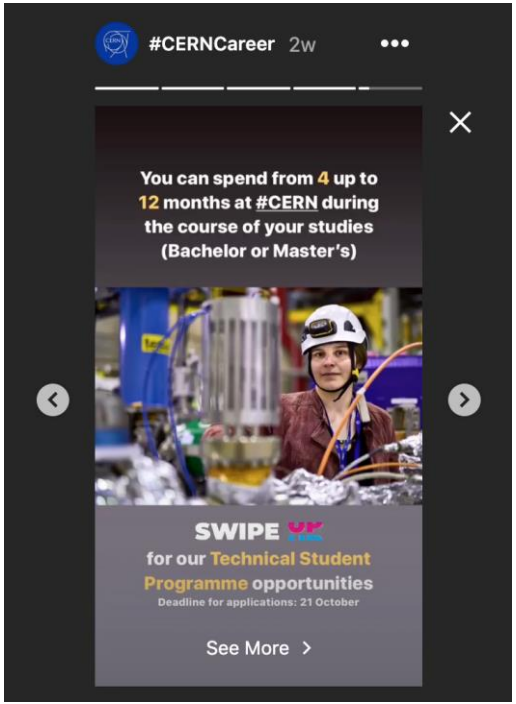
Tell human stories

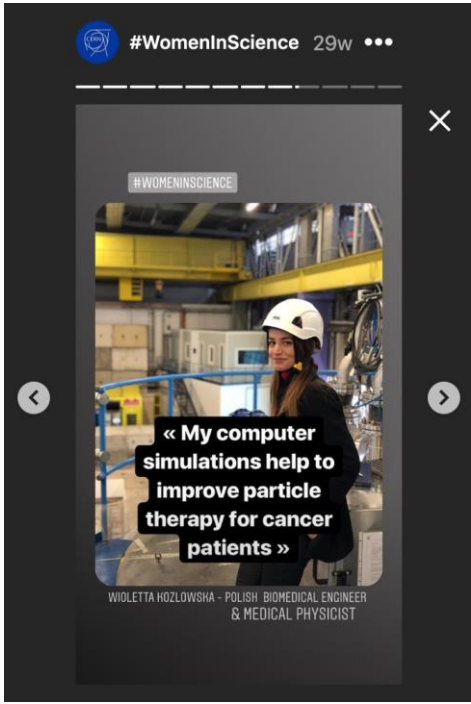
Who is hiding behind physics?
Passion for working at CERN

#CERNeyes

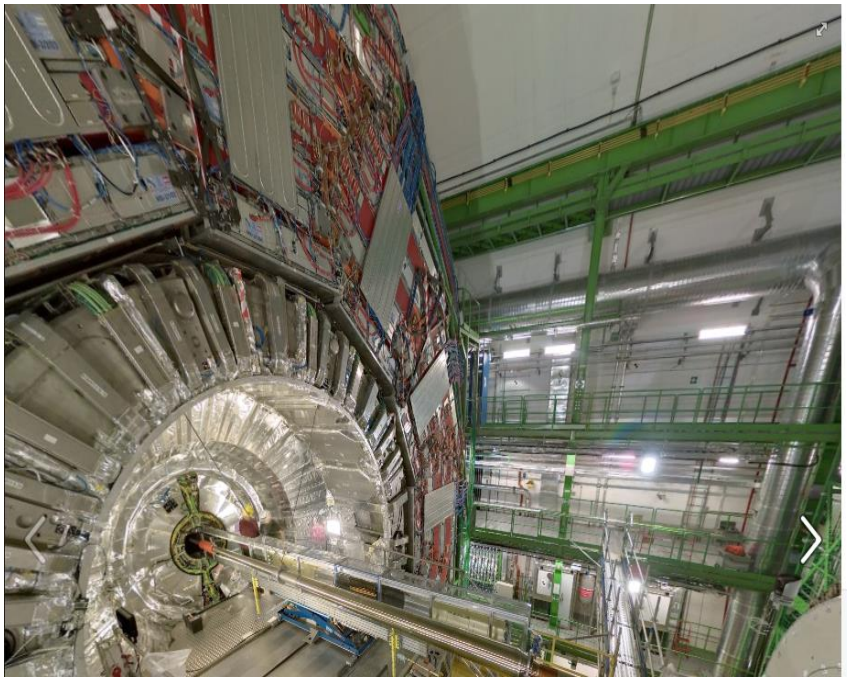
#WomenInScience

#CERNCareer





Facebook Lives & The power of 360 °



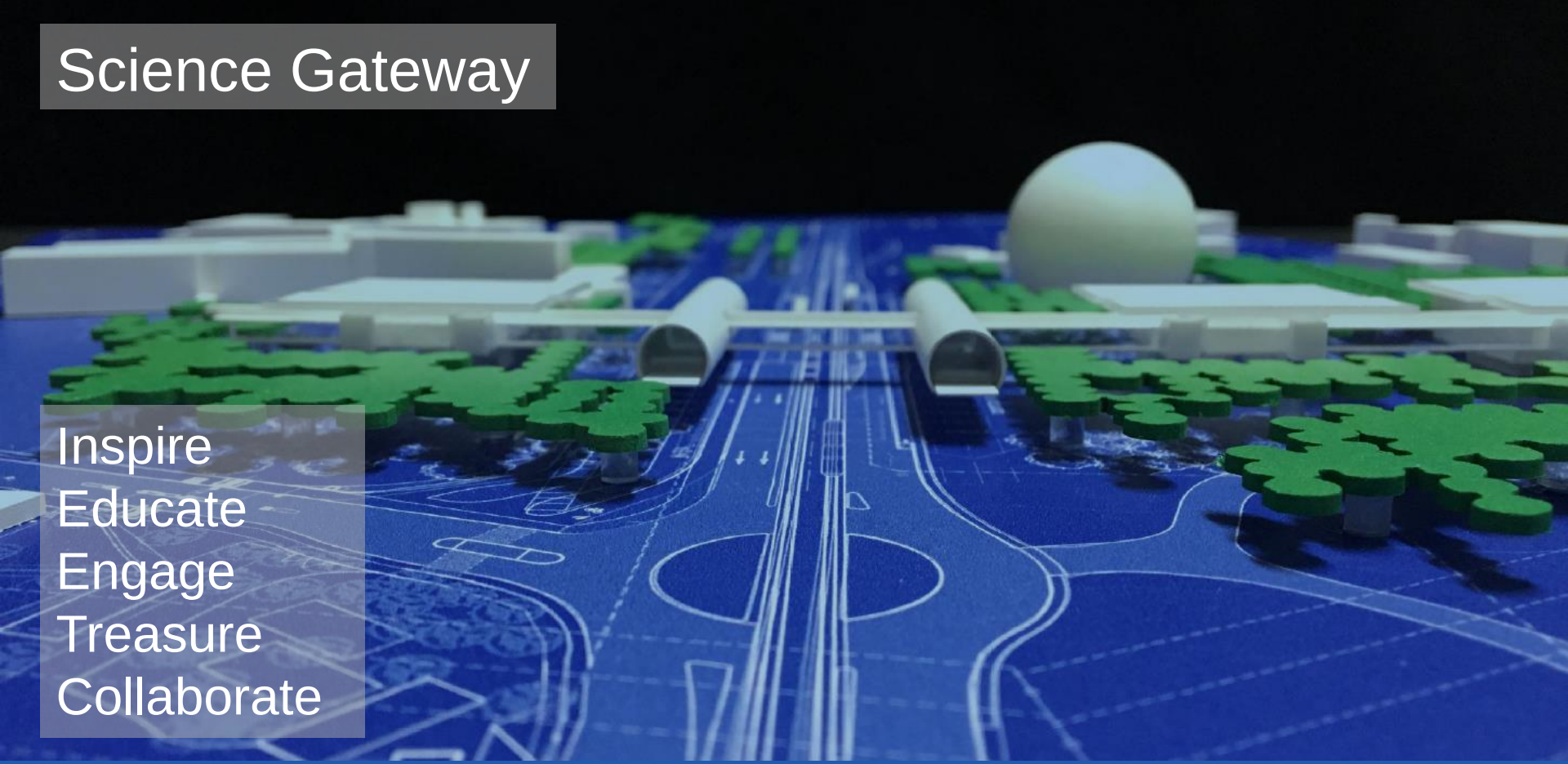
Reaching new audiences

Taking physics to music festivals

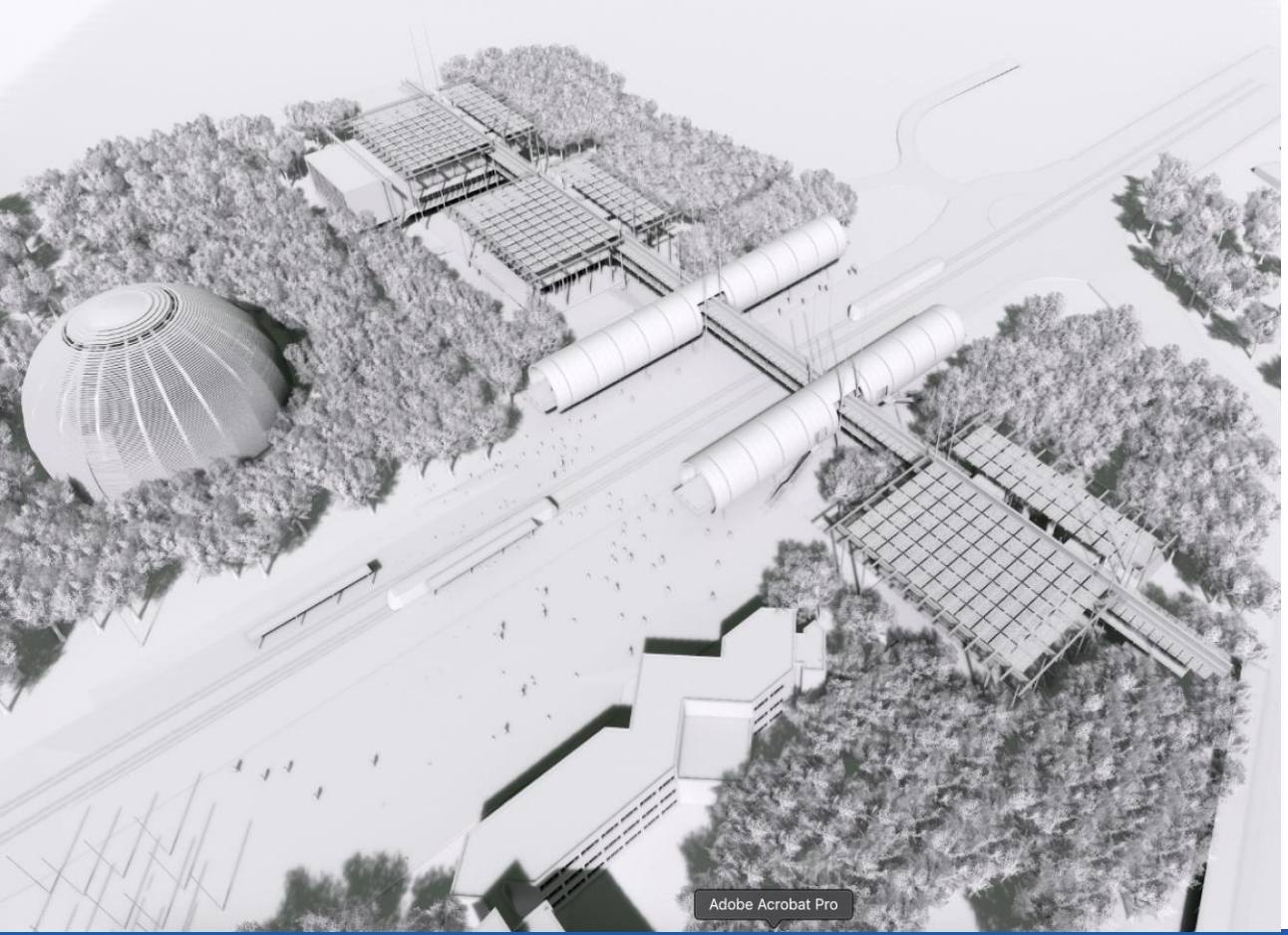
Overview of registered visitors (06/09/2019

Day	Total	Distributed	Available	Percentage
Fri 13	3960	3905	55	
Sat 14	43451	36478	6973	
Sun 15	43451	33124	10327	

Science Gateway



Inspire
Educate
Engage
Treasure
Collaborate



Building by architect Renzo Piano (RPBW)

“It’s a place where people will meet. Kids, students, adults, teachers and scientists, everybody attracted by the exploration of the Universe, from the infinitely vast to the infinitely small. It is a **bridge, in the metaphorical and real sense**, and a building fed by the energy of the sun, nestling in the midst of a newly grown forest.”

Obrigada!
Até breve!