

A divulgação e a comunicacão de ciência no CERN De olhos postos no futuro

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## CERN's mission is underpinned by four pillars





## CERN Science Gateway programme



## Science Gateway Exhibitions



## Accelerate




## Tube 2: Our Universe

History of the Universe

09.09.2022

## Exploring the Unknown

Artworks as an entry point to the big open mysteries in physics

Exhibition Themes: Space \& Time, the Void and the Invisible.

New commissions from Julius von Bismarck, Chloé Delarue \& Ryoji Ikeda, Yunchul Kim, Dorota \& Egle, in collaboration with Arts at CERN.

Residencies in 2021 where artists exchanged on the scientific topics of the exhibition with theorists.


Main Art Commission: Round About 4 Dimensions / Julius von Bismarck


window


## Science Gateway Education

## Science Gateway Education Activities

Labs
Discover your inner scientist


Science Shows
Explore the stories of discoveries


Online Learning
Engage online to find out more

09.09.2022

## Science Gateway Education

## Labs

Discover your inner scientist

- 45-90 min workshops in different languages \& tailored to age groups
- Focus on independent hands-on experimentation and teamwork
- Two lab spaces for each 24 participants

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- 30-45 min shows tailored to an international audience and different age groups
- Focus on surprising demonstrations and interactive storytelling
- Auditorium for $200+$ people

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- Videos with quiz questions, DIY experiments, material for educators
- Focus on independent $n g$ learning Object first?
- Material in English and French


## Topics

- Detectors \& sensors: making the invisible visible
- Accelerators \& magnets: manipulating particles
- Information Technology: creating a unique computing infrastructure
- Engineering: making the impossible possible
- Theory: rationalising, predicting and explaining phenomena
- Data reconstruction \& analysis: making sense of observations
- Technology: manipulating robots, vacuum and cryogenics
- Applications: bringing CERN's technologies into our everyday life
- Scientific methods, models and nature of science: doing science
- STEM careers: exploring STEM occupations and workplaces


## Learn Online

## The CERN- Solvay Education Programme




## Science Gateway Events



## As one auditorium (898 seats)



## As three auditoriums (450 + $198+198$ seats)





## Guided tours

## GUIDED TOURS



- Close to 150000 visitors / year
- $60 \%$ of visitors come from $>600 \mathrm{~km}$ away
- Guides are CERN researchers, engineers and staff
- Can be combined with workshop in the education labs, a science show, a visit to the exhibitions


## Virtual tours and talks

- https://visit.cern/virtual
- https://visit.cern/discover-cern-online


Spend one hour with our experienced guides to discover CERN online. See how it's organised, its tools, its research, the people behind it, see its most inaccessible places, ask questions and all this.... from the comfort of your home.

## Specific programmes

## Teacher programmes continue to be core to CERN's education programme

## Huge thanks to the one and only Jeff!



2020 - COVID lead to cancellation of on-site programmes

- Only 3 National programmes, 0 International programmes
- Launched online programmes

2021 - Building back

- 15 online teacher programmes
- 1900+ teachers from 82 countries

2022 - Back on site! Welcome!

- Both international teacher programmes
- 21 national teacher programmes
- Online format too (3 programmes)
- https://teacher-programmes.web.cern.ch/


## Beamline for Schools competition - the greatest value is in competing



For teams of high-school students (aged 16 and over)

Propose research project using beamline

2 winning teams each year: GR, NL, SA, IT, PL, UK, CA, PH, IN, USA, CH, DE, MX...

In 2022: 2 winning teams (EG, ES) at CERN + 1 team (FR) at DESY, Hamburg

## ECO's mission is underpinned by four pillars



## Obrigada pela vossa atenção!



