

Opportunities at the cutting edge of technology

An introduction to CERN Careers – Péter JURCSÓ

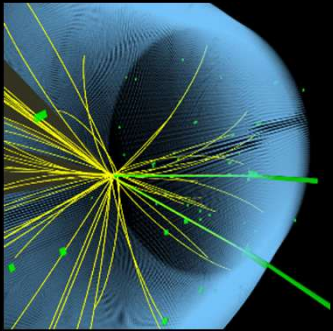
70 years of research.

24 member states.

10 associate member states.

1 mission.

The mission



Research



Collaboration

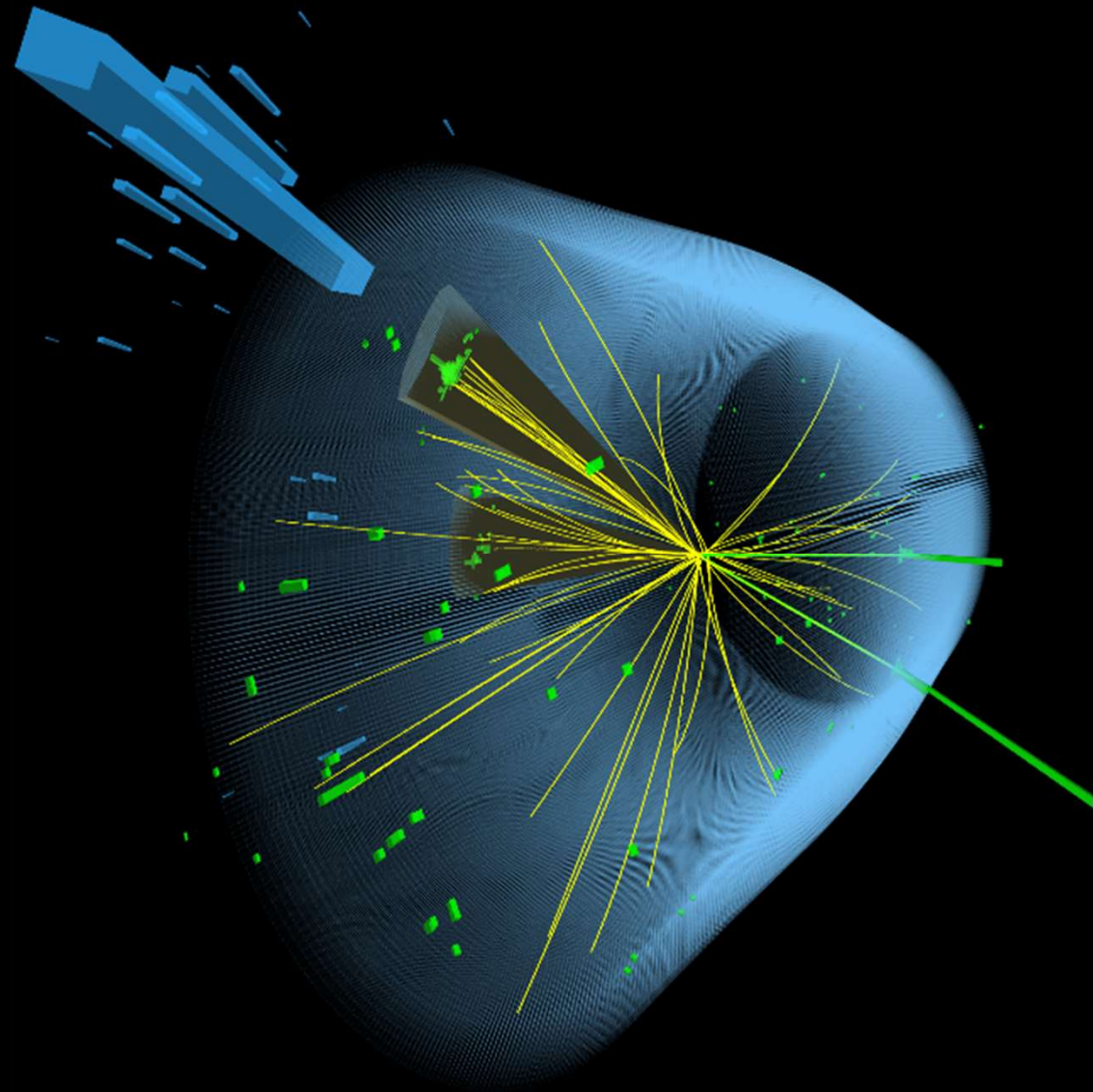


Education



Technology

“Perform world-class research in fundamental physics”





“Unite people from all over the world to push the frontiers of science and technology, for the benefit of all.”

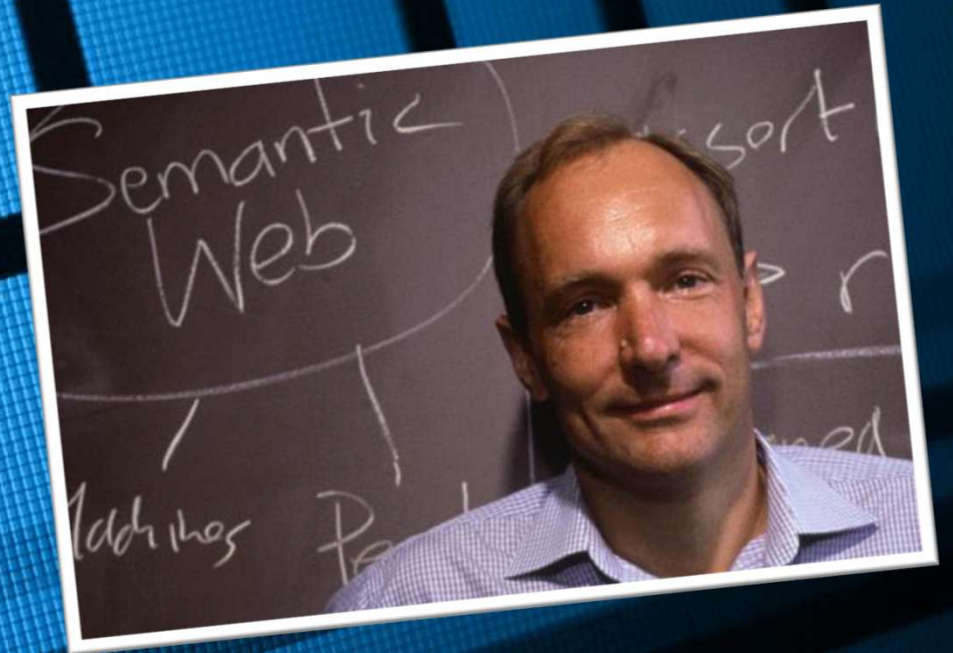


“Training tomorrow's scientists and engineers and promoting the uptake of careers in STEM”



World Wide Web

HTTP

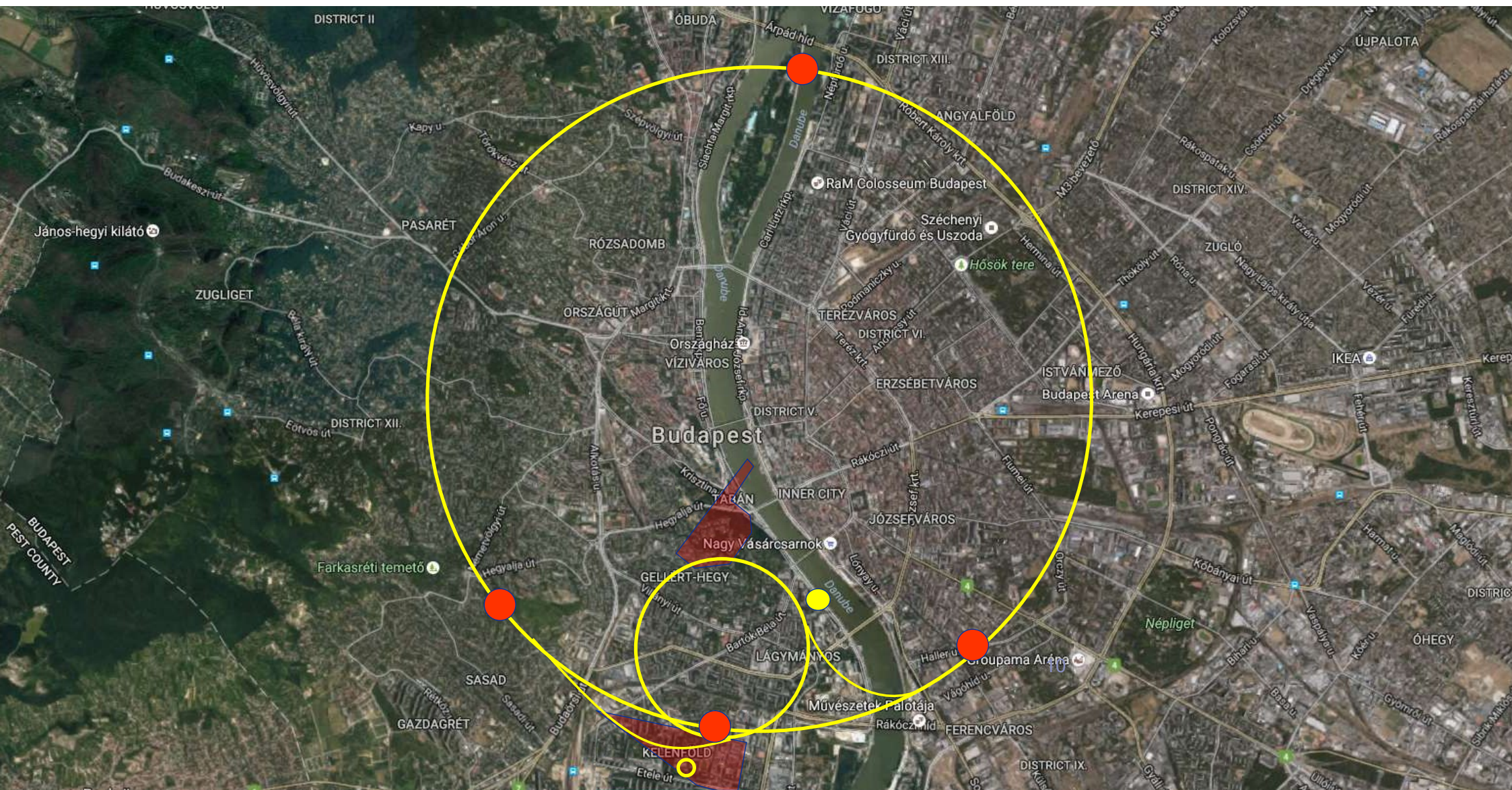




“Provide a unique range of particle accelerator facilities that enable research at the forefront of human knowledge”

Campus location: Franco-Swiss border near Geneva





15/05/2025

HR Talent Acquisition | Opportunities to learn and work at CERN | Péter JURCSÓ

Future Circular Collider (FCC)

Timeline

2025: Completion of the FCC Feasibility Study
2027–2028: Decision by CERN Member States and international partners

Tunnel

90.7 km circumference
200 m average depth
8 surface points (7 in France, 1 in Switzerland)

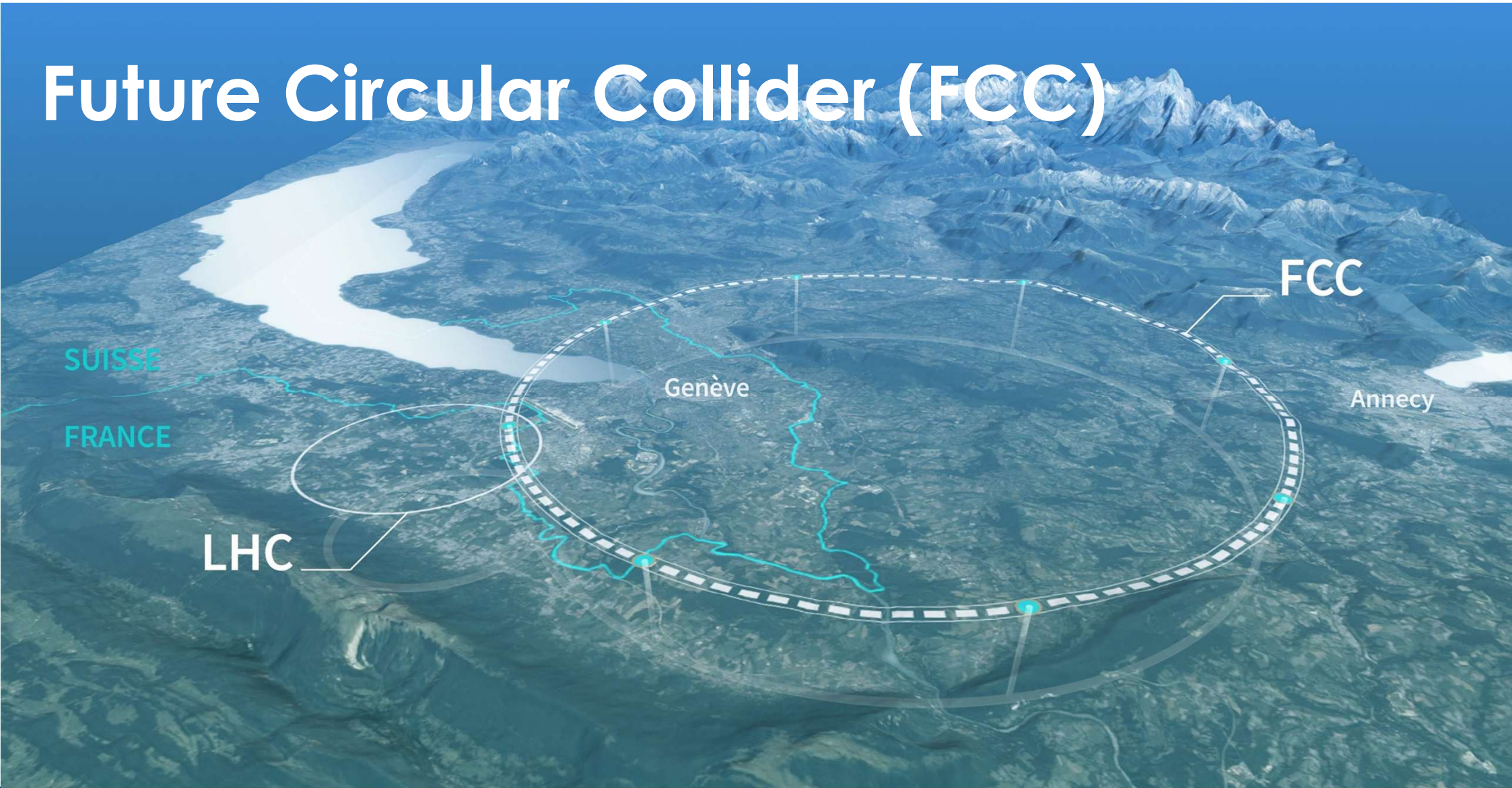
Two Stages

FCC-ee (precision measurements) about 15 years from the mid-2040s
FCC-hh (high energy) about 25 years from the 2070s

Costs/Benefits

15 billion CHF, spread over at least 15 years for FCC-ee with four experiments
Estimated benefit–cost ratio of 1.66
About 800 000 person-years of employment created

Future Circular Collider (FCC)



Equipment

Accelerators

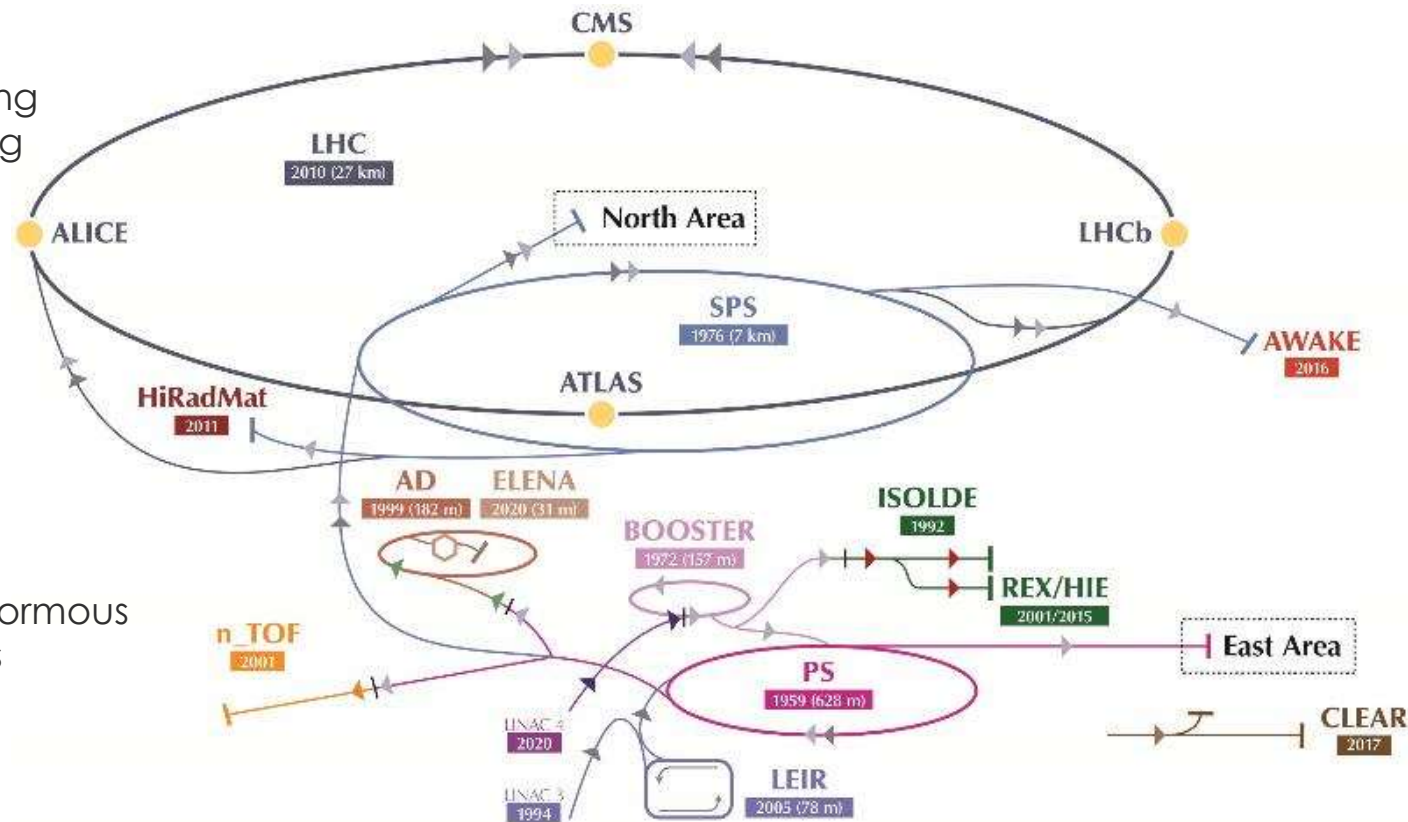
Powerful machines capable of accelerating particles to very high energies before being collided with other particles

Detectors

Gigantic instruments that record particle collisions

Computers

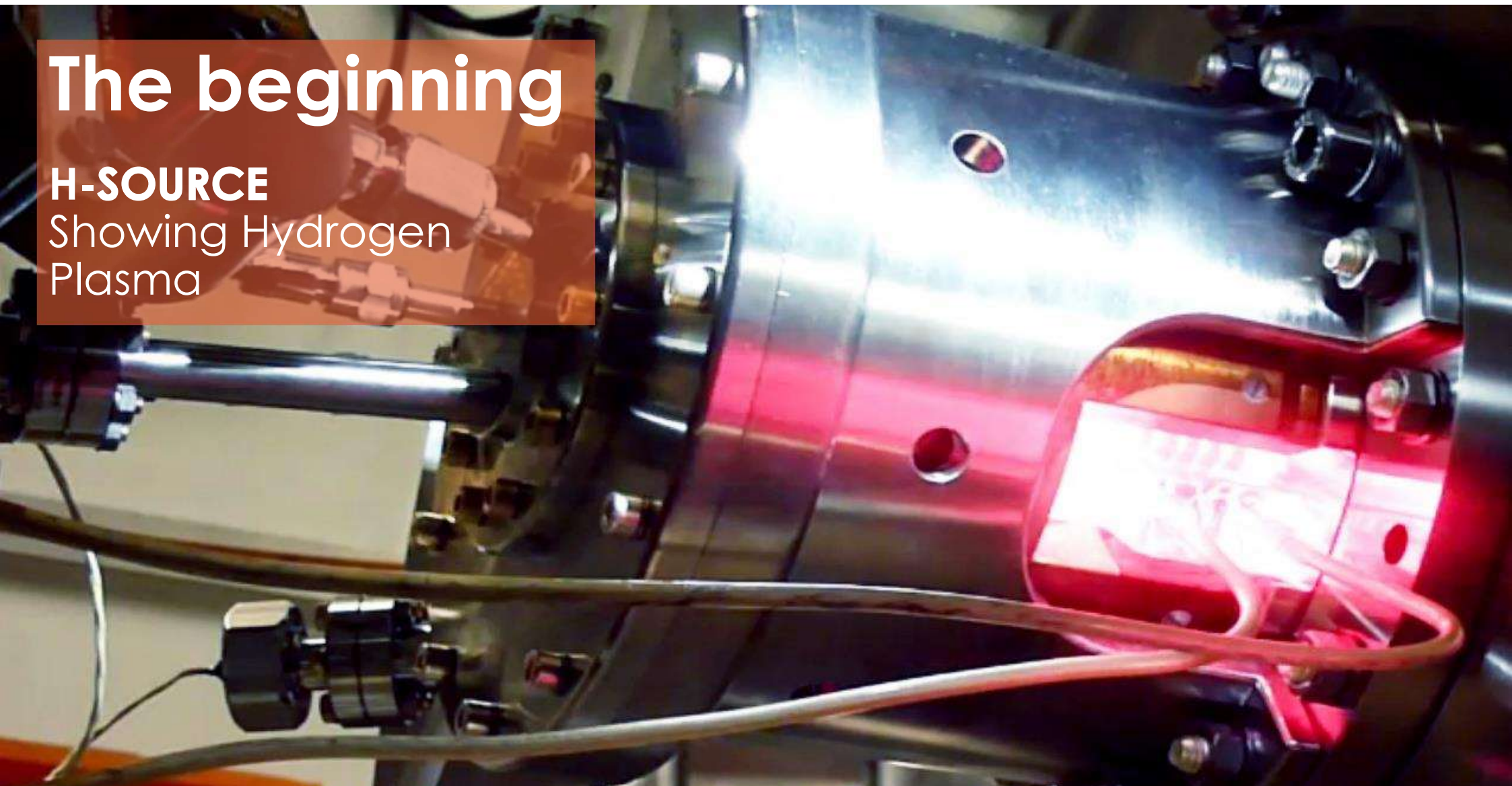
To collect, store, distribute and analyse enormous quantities of data generated by detectors



The beginning

H-SOURCE

Showing Hydrogen
Plasma



Controlling

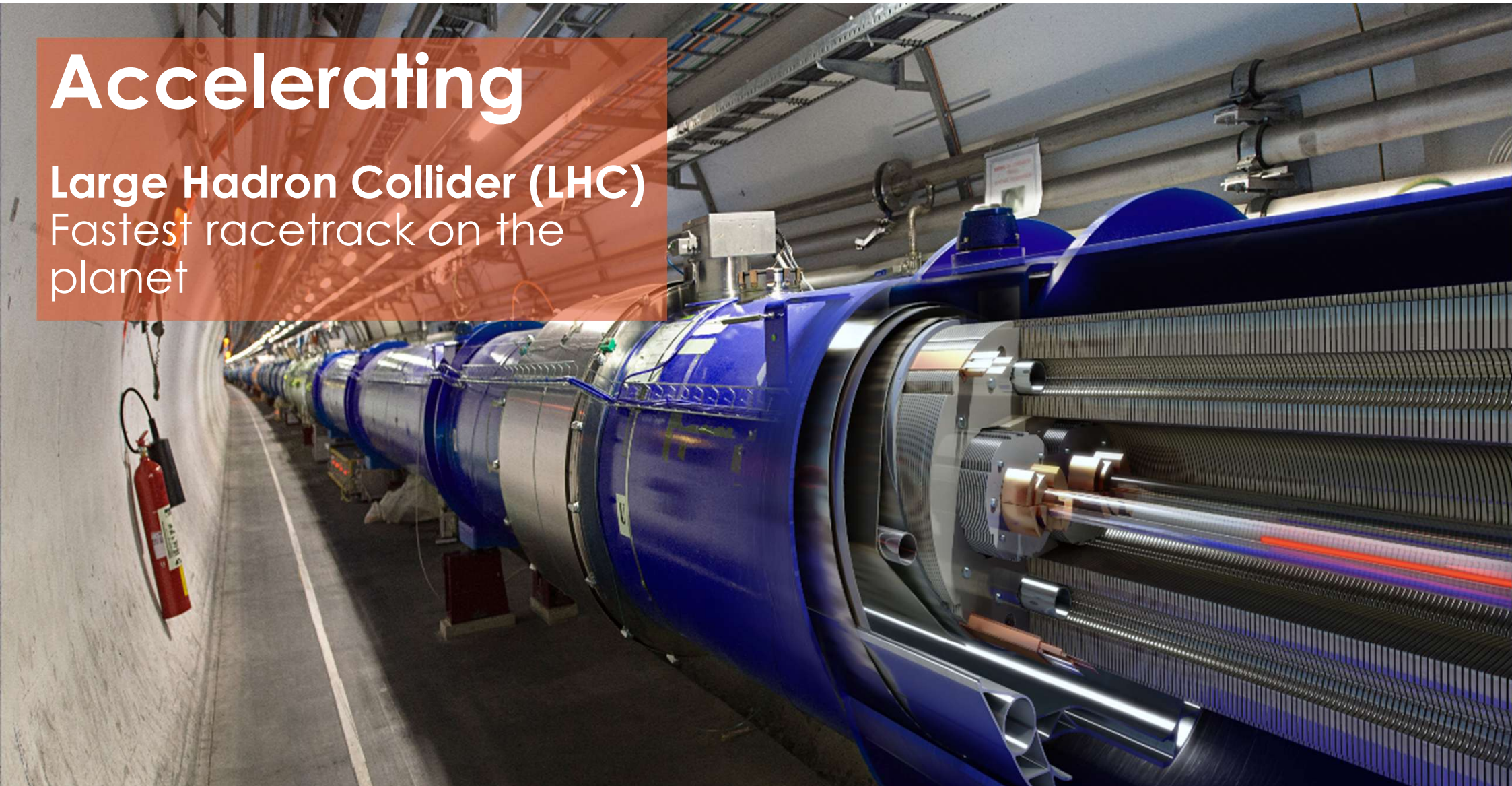
Beam Systems

Nerve centre of CERN



Accelerating

Large Hadron Collider (LHC)
Fastest racetrack on the planet



Superconducting

Magnets colder than outer space
With the best vacuum

Colliding

The hottest spots
in the galaxy

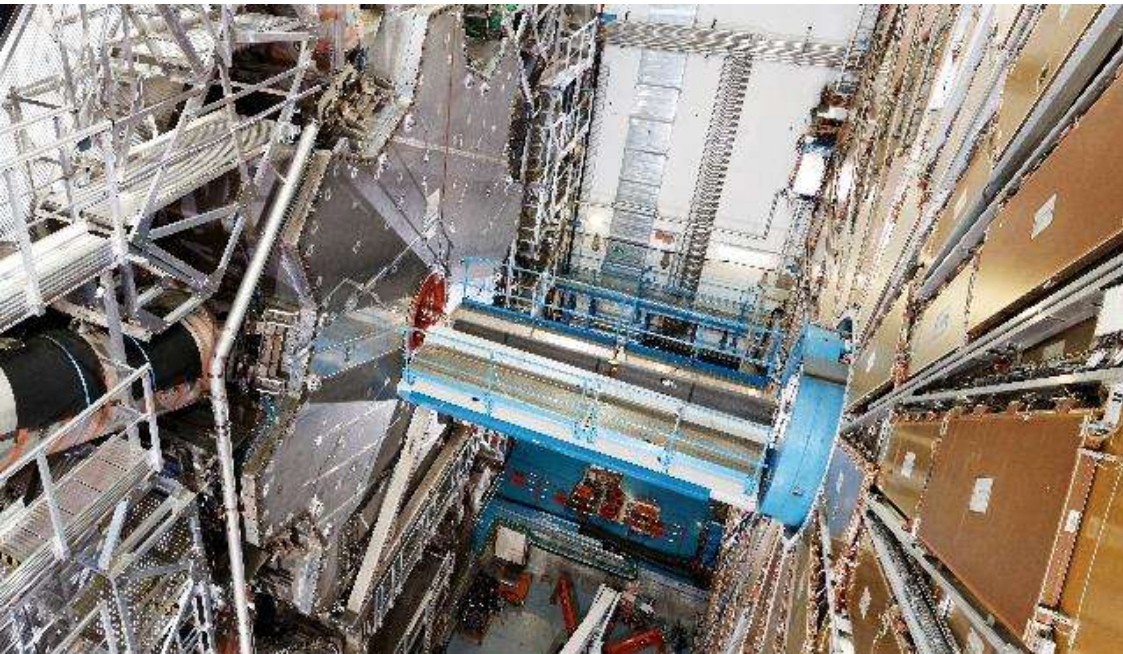


Detecting

The most sophisticated detectors ever built


Atlas: As big as a 5 storey building

CMS: Heavier than the Eiffel Tower



Imagine...

- being at the forefront of technology and physics;
- collaborating with multicultural and multidisciplinary teams;
- following experts in their technical domain;
- being part of a dynamic environment with training opportunities;
- benefitting from an attractive remuneration package;
- making valuable and long-lasting contacts from all over the world;
- learning languages: CERN is a bilingual organisation (English and French).



DREAM. BECOME. GROW.

Are you embarking on a PhD?

TAKE PART!

DOCTORAL STUDENT PROGRAMME
Imagine getting involved in work that is changing the world. You will work with experts in your field. Put all these ingredients together to make this programme a reality. You will be spending up to 24 months at the laboratory, working on a project of your choice. Your research will be supervised by an expert in your field. Physics, Big Data, or Computing. It is an invitation to the world's largest scientific community. To get involved in the most important scientific projects of our time.

Apply online: careers.cern/s/

DREAM.

THINK. INNOVATE. CREATE.

Imagine working in a place like nowhere else on earth...

TAKE PART!

CERN could be the next step in your career!

Find out more: <http://careers.cern>

on-job training.

The world and imagine doing it better. There are no borders here. Now is a great time to start your career at CERN. The job is open to all. You will be working in a dynamic environment. You will be part of a team. You will be working on a project of your choice. You will be spending up to 24 months at CERN. Your research will be supervised by an expert in your field. Physics, Big Data, or Computing. It is an invitation to the world's largest scientific community. To get involved in the most important scientific projects of our time.

CH

Various areas besides physics..

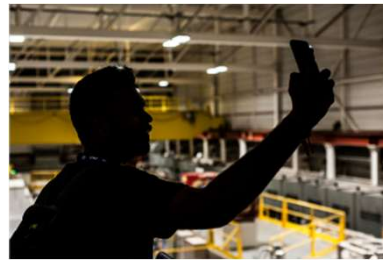
ROBOTICS



COMPUTING



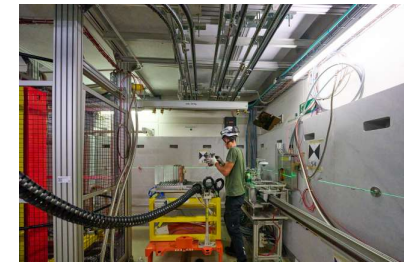
COMMUNICATION



RADIO FREQUENCY



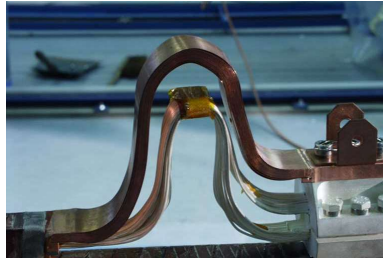
ELECTRONICS



**VACUUMS AND
CRYOGENICS**



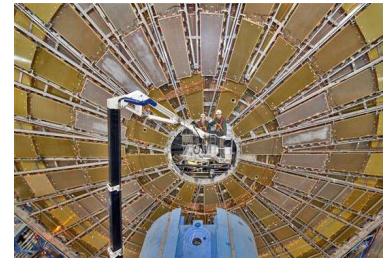
**ELECTRICAL
ENGINEERING**



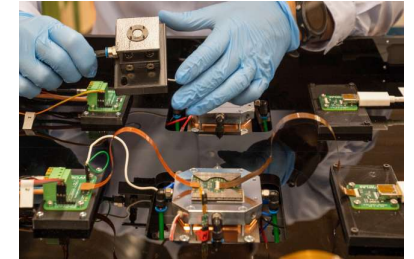
**CIVIL
ENGINEERING**



**MECHANICAL
ENGINEERING**



**MATERIALS
SCIENCE**



Your opportunities

PROFESSIONALS & GRADUATES

ORIGIN

Early Career Professionals

STAFF MEMBERS

QUEST

Experienced Project
Graduates

RESEARCH FELLOWS

Post-docs

STUDENTS

TECHNICAL &
ADMINISTRATIVE
STUDENTS

DOCTORAL
STUDENTS

SUMMER STUDENTS

SHORT-TERM
INTERNS

Technical Student Programme

~ 250 positions/year

*“A great place to start a career,
learn new skills, make new friends...”*

- technical student in electronics

Applied physics, electrical or electronics engineering, general or civil engineering, IT, mathematics and robotics, material and surface science, mechanical engineering...

- A project with a CERN supervisor
- An allowance of 3452 Swiss Francs per month (net of tax)
- A travel allowance
- A supplement if you have a spouse and/or have children
- Comprehensive health insurance
- 2.5 days of paid leave per month

Eligibility: Minimum of 18 months of undergraduate studies

Length: 4 to 12 months

Application Periods: Open for applications 3 times per year - Dec-Mar, May-Jul, Aug-Nov



Key facts: Technical Student Programme

6 different focus domains

- Electric/Electronics Engineering
- Mechanical Engineering
- IT, Mathematics & Robotics
- Material & Surface Science
- Applied Physics
- General/Civil Engineering



Required Application Documents (in pdf):

- CV

Optional/recommended:

- Motivation letter
- Transcript
- Reference letter

Depending on their qualifications/profile, candidates can also apply for several programs at the same time!

Administrative Student Programme

~ 30 positions/year

“An enriching experience – I had exposure to more activities than I could have imagined,”

Administrative student in Legal

Translation, human resources, business administration, law, finance, science communication, public relations...

- A project with a CERN supervisor
- An allowance of 3452 Swiss Francs per month (net of tax)
- A travel allowance
- A supplement if you have a spouse/partner and/or have children
- Comprehensive health insurance
- 2.5 days of paid leave per month

Eligibility: minimum of 18 months of undergraduate studies

Length: 2 to 12 months

Application Periods: Open for applications 3 times per year - Dec-Mar, May-Jul, Aug-Nov



Doctoral Student Programme

~ 80 positions/year

“An opportunity to meet important people, especially in the research field”

Doctoral student in Physics

Applied physics, electrical or electronics engineering, general or civil engineering, IT, mathematics and robotics, material and surface science, mechanical engineering...

- A research topic/project, leading to a PhD thesis co-supervised by the university thesis advisor and a CERN staff member
- An allowance of 3868 Swiss Francs per month (net of tax)
- A travel allowance
- A supplement if you have a spouse/partner and/or have children
- Comprehensive health insurance
- 2.5 days of paid leave per month

Eligibility: Enrolled in a doctoral programme in a university

Length: 36 months and 12 months of unpaid leave

Application Periods: Open for applications 3 times per year - Dec-Mar, May-Jul, Aug-Nov



Summer Student Programme

~ 300 positions/year

“Can’t imagine a better way to spend my summer”

Summer student in computing

Applied physics, electrical or electronics engineering, general or civil engineering, IT, mathematics and robotics, material and surface science, mechanical engineering...

- Series of lectures delivered by world-wide renowned scientists, visits and workshops.
- A project with a CERN supervisor.
- A 93 CHF per calendar day (net of tax) subsistence allowance to cover the cost of accommodation and meals in the Geneva area for a single person for the whole contract duration.
- A travel allowance on a lump sum basis paid at the end of your stay to help you with the cost of travel between Geneva and your residence at the time of the selection committee.
- Coverage by CERN's comprehensive Health Insurance scheme (contribution already deducted from allowance).
- Assistance to find accommodation on the CERN site or nearby.

Eligibility: 3 years of full-time studies at university level

Length: 8 to 13 weeks over summer

Application Period: November – January



Short Term Internship Programme

~ 250 positions/year

“A great opportunity for your career and also a very rewarding life experience”

Short-term intern in mechanical engineering

All disciplines in science, engineering, technical and administrative fields

- A project with a CERN supervisor
- A living allowance of 1577 CHF per month

Eligibility: Be a full-time student at undergraduate level (post-secondary)

Length: 1 to 6 months

Application Period: Open for applications all year round



Early Career Professionals

~ 300 positions/year

“The smartest way to kick-start your career and give it real momentum.”

All disciplines in science, engineering, technical and administrative fields

- On-the-job learning by full immersion in a CERN team and their activities
- A stipend ranging from 4569 to 5647 Swiss Francs per month (net of tax)
- Comprehensive health insurance (for yourself, your spouse/partner, and children)
- Membership of the CERN Pension Fund
- Other benefits may include: Installation grant, family, child and infant allowances; payment of travel expenses at the beginning and end of contract
- 2.5 days of paid leave per month.

Eligibility: From general secondary education to Master level, with max. 2 years of relevant experience after your highest degree

Length: From 6 to 36 months, in principle duration of 24 months

Publication/Application Period: Continuous hiring throughout the year, publication of positions on demand



ORIGIN
TAKE PART!



Experience Project Graduates

~ 100 positions/year

“Deepen your knowledge and expertise faster than anywhere else on earth.”

Applied physics, electrical or electronics engineering, general or civil engineering, IT, mathematics and robotics, material and surface science, mechanical engineering...

- Work on well-defined project from A to Z with clear deliverables
- Deepen your expertise and expand your professional network by working with the best experts
- Opportunity to supervise student
- A stipend ranging from 6212 to 6828 Swiss Francs per month (net of tax)
- Comprehensive health insurance (for yourself, your spouse/partner, and children)
- Membership of the CERN Pension Fund
- Other benefits may include: installation grant, family, child and infant allowances; payment of travel expenses at the beginning and end of contract
- 2.5 days of paid leave per month

Eligibility: Master's with 2 to 6 years of relevant experience or PhD with up to 3 years of relevant experience

Length: From 6 to 36 months, in principle duration of 24 months

Publication/Application Period: Continuous hiring throughout the year, publication of positions on demand



QUEST
TAKE PART!



Research fellows

~ 40 positions/year

“Make your mark and hone your skills at a place like no other.”

Applied physics, theoretical physics, experimental physics, electrical or electronics engineering, mathematics and robotics, material and surface science, mechanical engineering...

- Define your own research project and benefit from international exposure
- A stipend ranging from 6828 to 7239 Swiss Francs per month (net of tax)
- Comprehensive health insurance (for yourself, your spouse/partner, and children)
- Membership of the CERN Pension Fund
- Other benefits may include: Installation grant, family, child and infant allowances; payment of travel expenses at the beginning and end of appointment
- 2.5 days of paid leave per month

Eligibility:

- *Theoretical and Experimental Physics*: PhD with up to 6 years of relevant experience
- *Applied Sciences and Engineering*: PhD with up to 3 years of relevant experience

Length: From 6 to 36 months, in principle duration of 24 months

Application Periods: Open for applications twice per year – December-February + June-August



Staff Positions

~ 150 positions/year

“It’s the chance to focus on being the very best at what you do.”

All disciplines in science, engineering, technical and administrative fields

- Attractive compensation package
- Comprehensive health insurance (for yourself, your spouse/partner, and children)
- Membership of the CERN Pension Fund;
- Other benefits may include: (re)installation grant, family, child and infant allowances; payment of travel and removal expenses at the beginning and end of contract; unemployment coverage.
- 2.5 days of paid leave per month.

Eligibility: From general secondary education to PhD

Length: Limited duration contract (5 years). Subject to certain conditions, holders of limited-duration contracts may apply for an indefinite position



Recruitment Process

Online Application



Video Interview
(if applicable)



Interview



Selection



Offer



Your discovery journey ... at CERN



Visits

- ❖ Bank, kindergarten, post-office, travel agency and library, not to mention access to three restaurants and free parking every day.
- ❖ Car fleet
- ❖ Conferences organised by various bodies



Jardin de Particules



CERN bikes



Many activities organised at CERN e.g. Relay Race



CERN clubs e.g. fitness, rugby, tennis, music, etc.

Your Life in the Region



- ❖ Easy traveling from Geneva (by train, road and plane)
- ❖ Sightseeing (lakes, cities,...)
- ❖ Hiking & Skiing
- ❖ Sport events
- ❖ Music, food, art festivals
- ❖ Swiss & French food and culture





jobs.cern



*“Magic is not happening
at CERN, magic is being
explained at CERN.”*

– Tom Hanks

“Mag
at CE
expl
- Tom

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