



# Report from the CLIC Communication Initiative (CCI)

CLIC Week 2018, January 26, 2018

***Rickard Stroem (CERN)***  
*on behalf of the CLIC Communication Initiative*



# CLIC Week 2018





# CLIC Communication Initiative (CCI)



## • **What do we do?**

- Dedicated task force to improve and coordinate the communication of the whole CLIC project (CLIC acc. study + CLICdp)
- General outreach, both inside and outside CERN
- Increase media visibility (CERN editorial meetings, ...)
- Increase physical visibility (graphics, CLIC gallery, showroom, wiki, ...)
- Help is always welcome!
- Please contact us at: [clic-cci@cern.ch](mailto:clic-cci@cern.ch)

## • **Who are we?**

- Philip Burrows
- Konrad Elsener
- Davide Gamba
- Nikos Kokkinis
- Lucie Linssen
- Aidan Robson
- Steinar Stapnes
- Rickard Ström
- Walter Wuensch



# CLIC in the news



## CERN social media



- *Report from CLIC week 2017* (CERN Courier (CC) May 2017)
- *CLIC/ILC distributed computing* (EGI media 2017, page 16-17)
- IPAC report (CC Jul/Aug 2017)
- *"Toward top physics in electron-positron collisions"* (EP newsletter, Sep 2017)
- *"CLEAR prospects for accelerator research"* (CC Nov 2017)
- *"EU project lights up X-band technology"* (CC Dec 2017)
- *"CLIC detector R&D" and "CLEAR"* on CERN social media (2017)
- *LC Newsline is back!*, incl. several CLIC-related stories (late 2017)
- *Europhysics News* article *"Towards TeV-scale electron-positron collisions with the Compact Linear Collider (CLIC)" APPROVED* (publication ~Feb)
- *"CLIC high-gradient spinoffs"*, large feature for CC Spring 2018 ONGOING
- Reports from CLIC Week 2018

**Special thanks to the authors/reviewers of all of these articles!**



# CLIC engagement



- **Academic talks:**

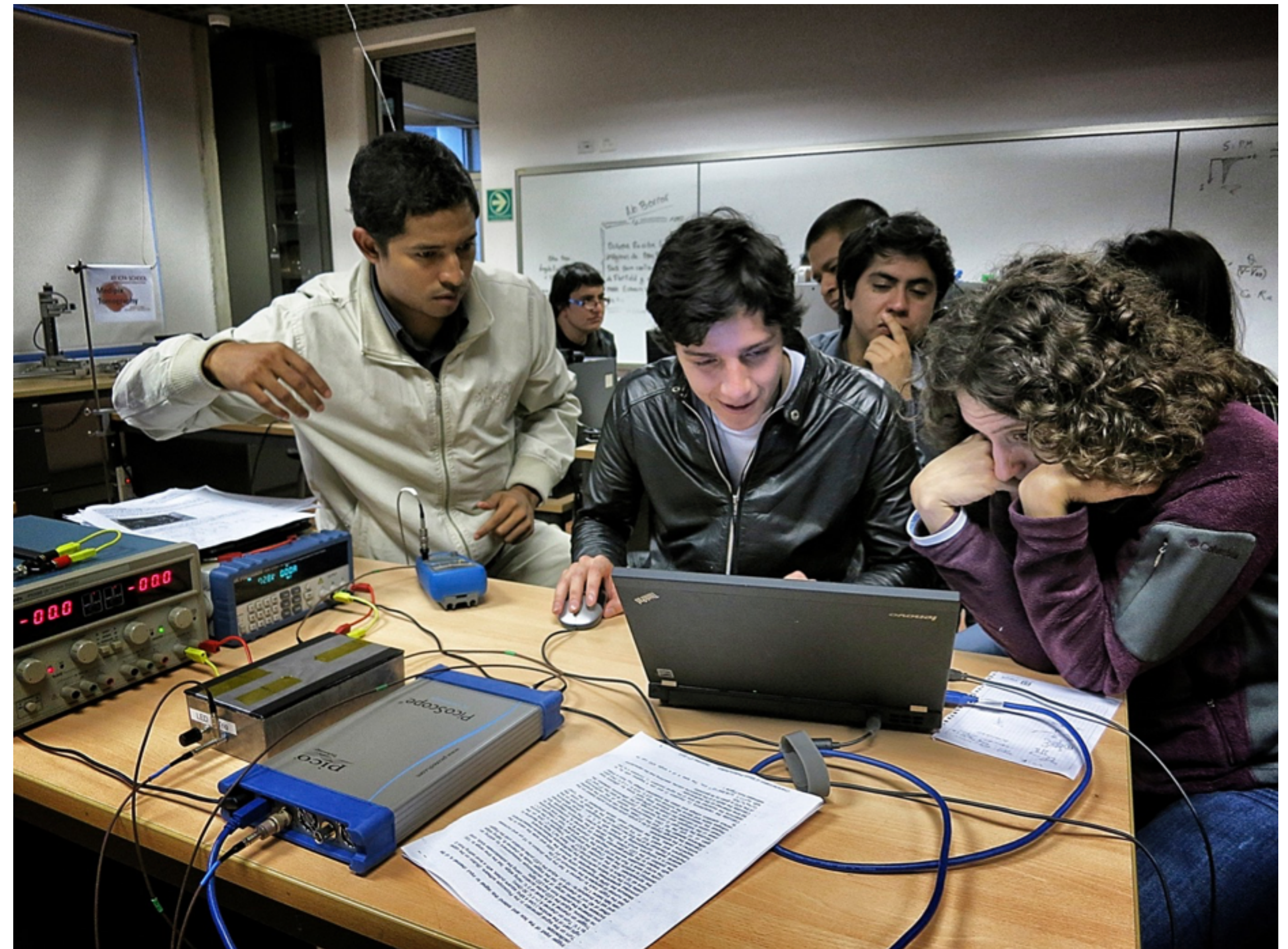
- Seminars
- Conferences/workshops
- CERN academic training lecture programme on CLIC

- **Hands-on activities:**

- For example detector technology teaching experiments (instrumentation schools and summer students)

- **Guided tours:**

- CLIC showroom, CTF3, etc.





# CERN academic training lecture programme on CLIC



- **When?** March 5-9, 2018, 11:00-12:00, Main auditorium
- **What?** 5 lectures on CLIC/high-gradient applications
  - “Physics potential of a high-energy  $e^+e^-$  collider” by *Philipp Roloff*
  - “Detector technology R&D for CLIC” by *Eva Sicking*
  - “The CLIC accelerator design and performance” by *Daniel Schulte*
  - “Key technology developments for the CLIC accelerator” by *Nuria Catalan*
  - “Overview of applications using high-gradient acceleration, from photon sources to medical physics” by *Walter Wuensch*





# CLIC graphics



- **New graphics**

- Used by the DG at New year's address!

- **CLIC maps/footprint**

- Staging
- Zoom-in on CLIC380 featuring more details (drive/main beam injectors)

- Developed in collaboration with the CLIC civil engineering team

- Special thanks to: Emilie Ter Laak, Matthew Stuart and John Osborne

- Located in [CDS](#)

- **CLIC project timeline**

- Located in [CDS](#)

- **Template for presentations** (CCI CERNBox)

DG New year's address  
16th January 2018 at 09:44 Fabiola Gianotti

Options and time scale for future high-E colliders at CERN

Current plan is to start at  $\sqrt{s} = 380$  GeV for Higgs and top studies and upgrade up to 3 TeV

2017 - 2019 Development Phase  
Development of a Project Plan for a compact CLIC implementation. It will define the technical specifications and study performance studies for various parameters, and will be used for technology development.

2021 - 2025 Preparation Phase  
Finalisation of implementation options, preparation for industrial procurement, Civil Design Study and other studies and activities. Technical studies of the superconducting linac.

2026 - 2024 Construction Phase  
Construction of the first CLIC installation. This includes the construction of the main ring and the injector complex.

DRAFT, purely technical, schedule assumes decision taken at 2020 ESPP and funding available

2019 - 2020 Studies  
2021 Construction Start  
2025 First Beams

Studies : CLIC and FCC => ESPP

Main goal for the European Strategy update :  
• Cost and power optimised 380 GeV machine (~11 km) (drivebeam and klystrons), upgradeable to 3 TeV

Key technical goals for the CLIC collaboration:  
• 30-year operation with a high reliability factor  
• High energy FEL linac using technology available in 2018  
• High efficiency electron (power and cost)  
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FCC CDR

ECC WEEK 2018

DG New Year's address,  
available [here](#)



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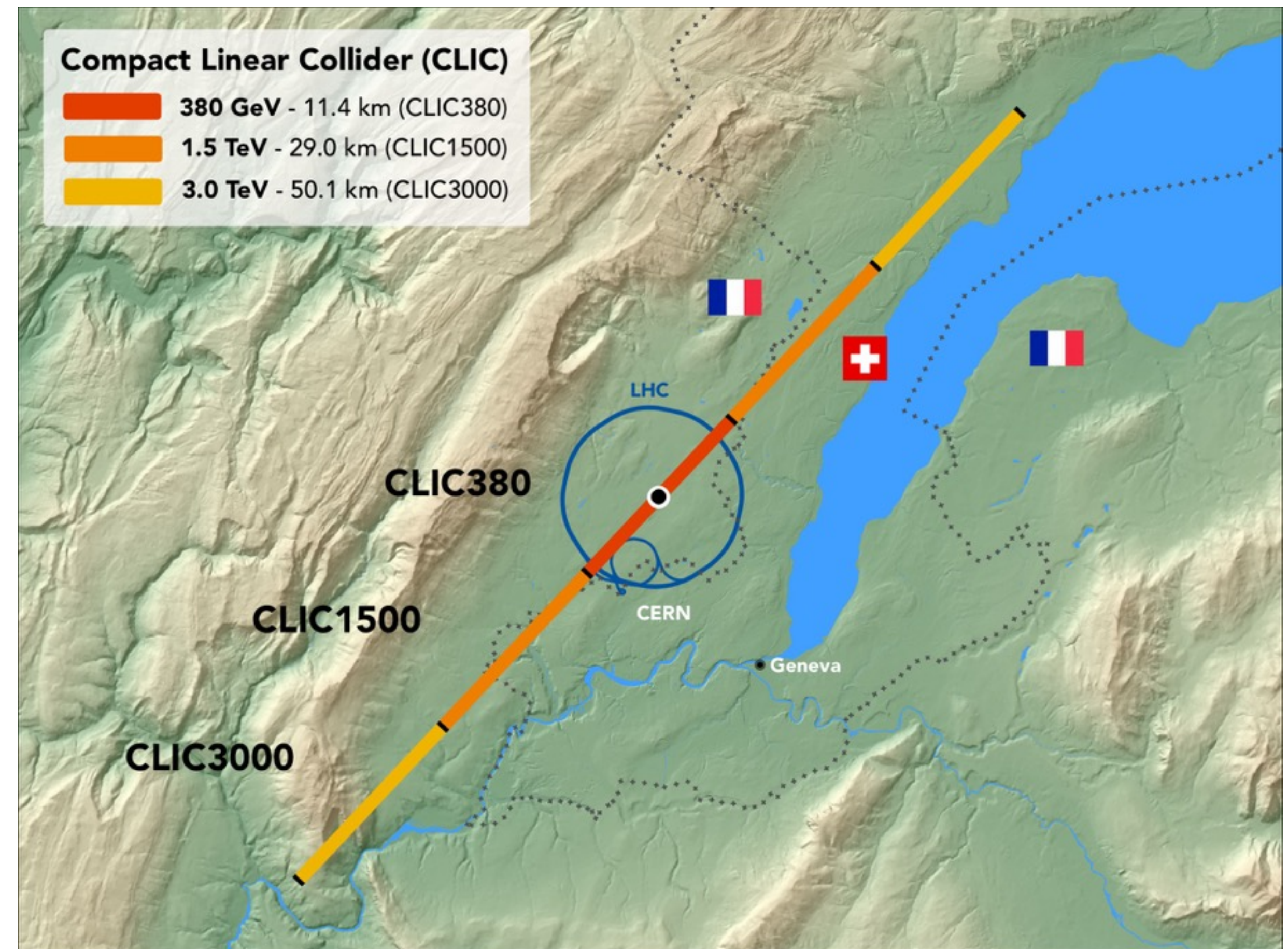
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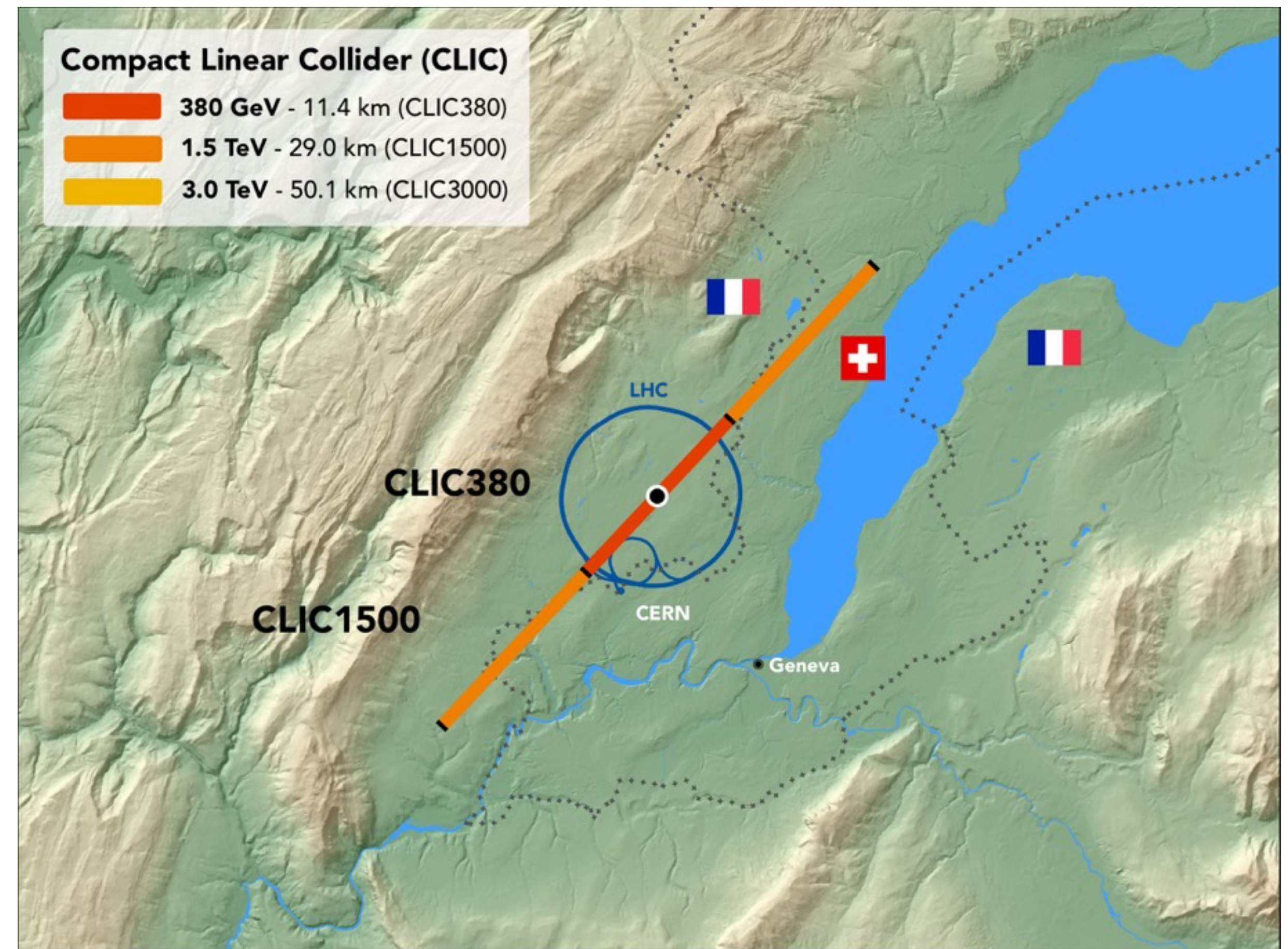
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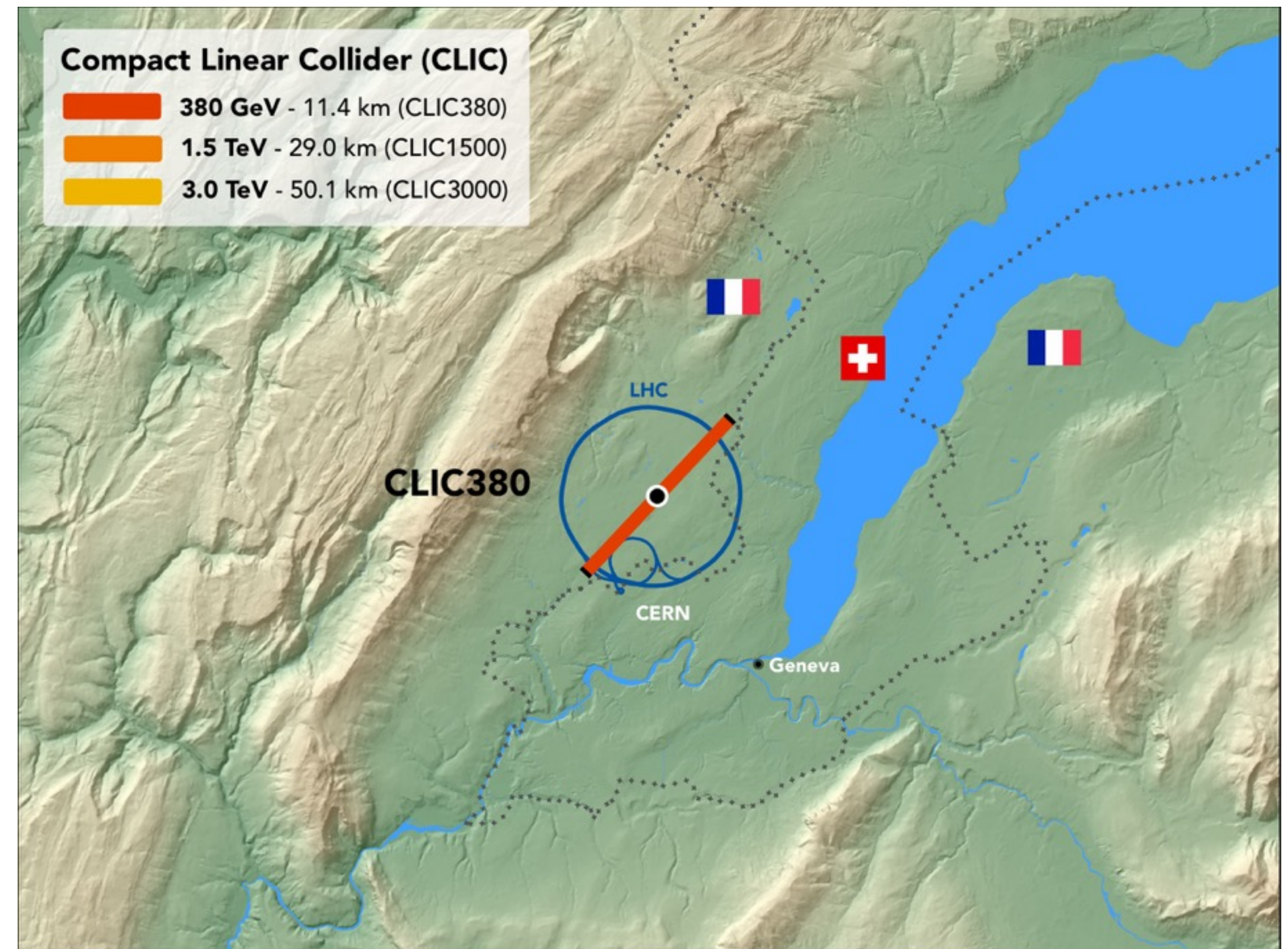
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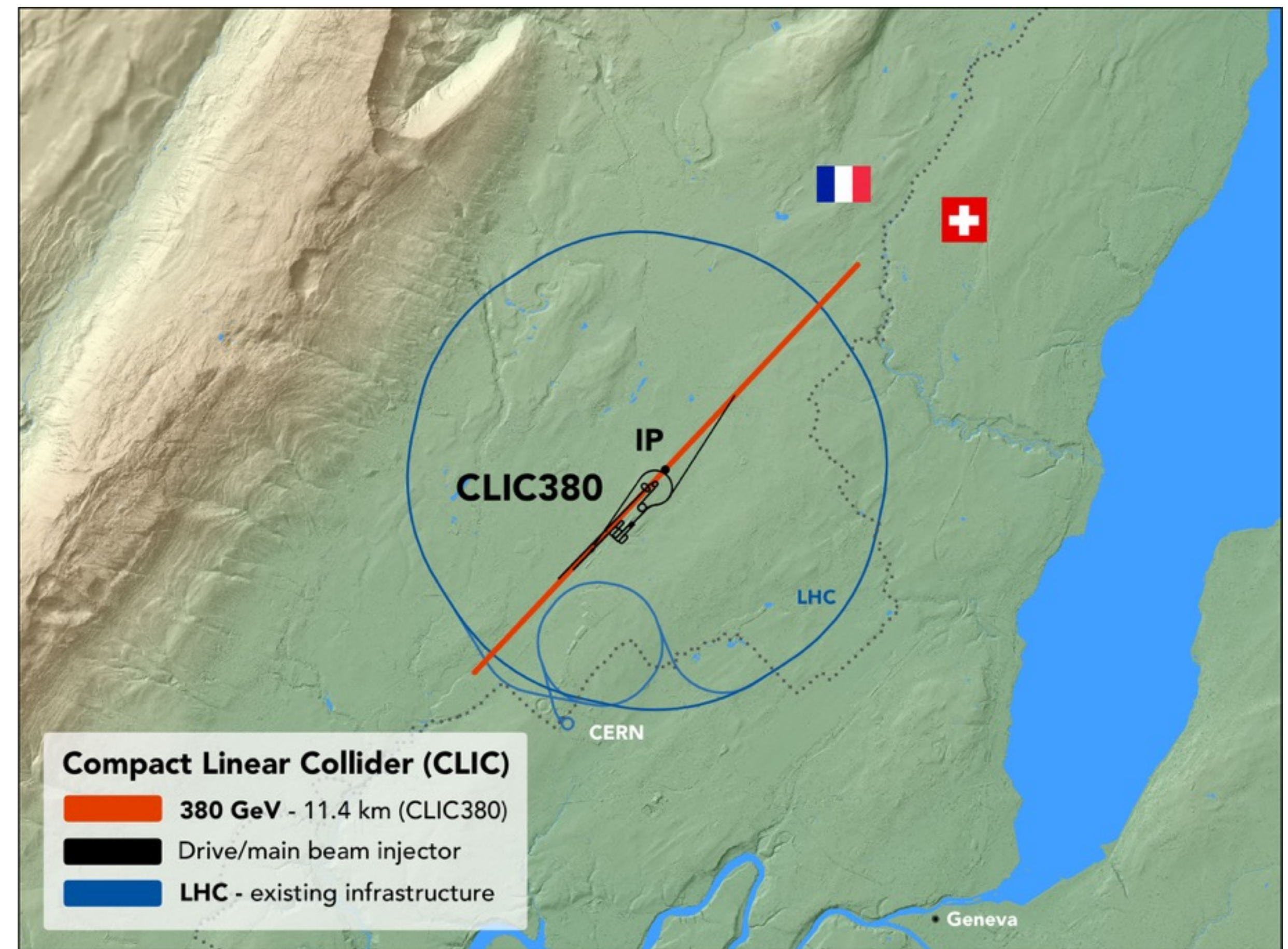
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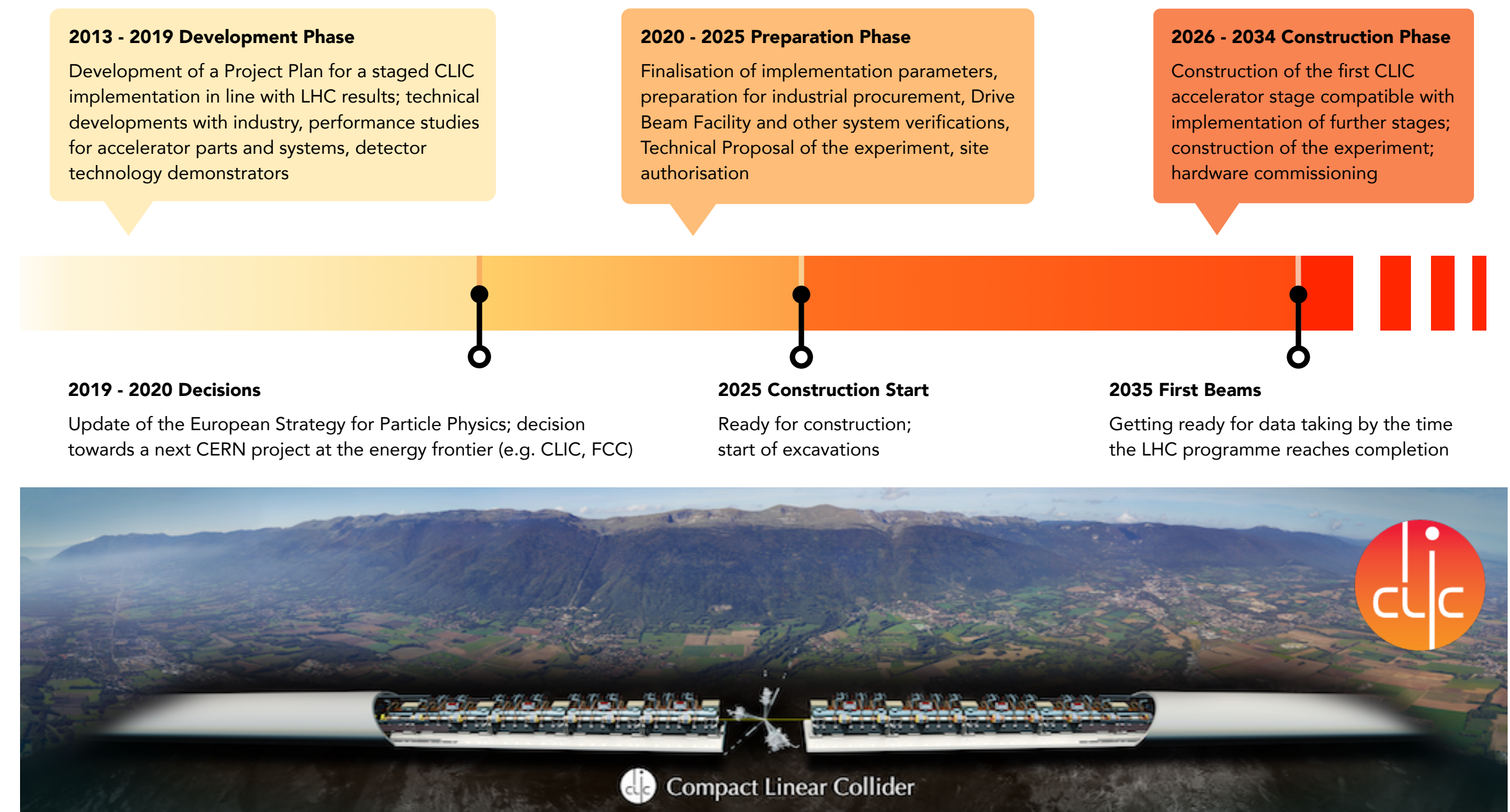
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Available in sizes: (16:9), (4:3)



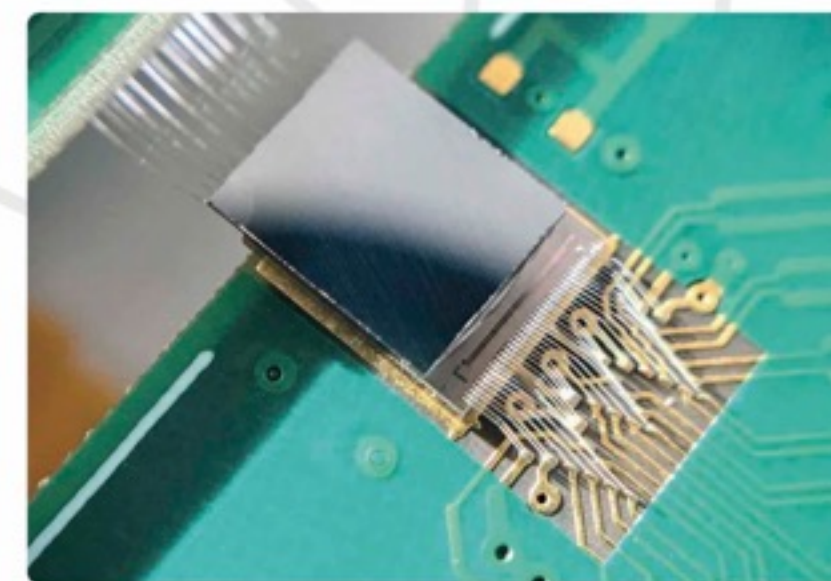
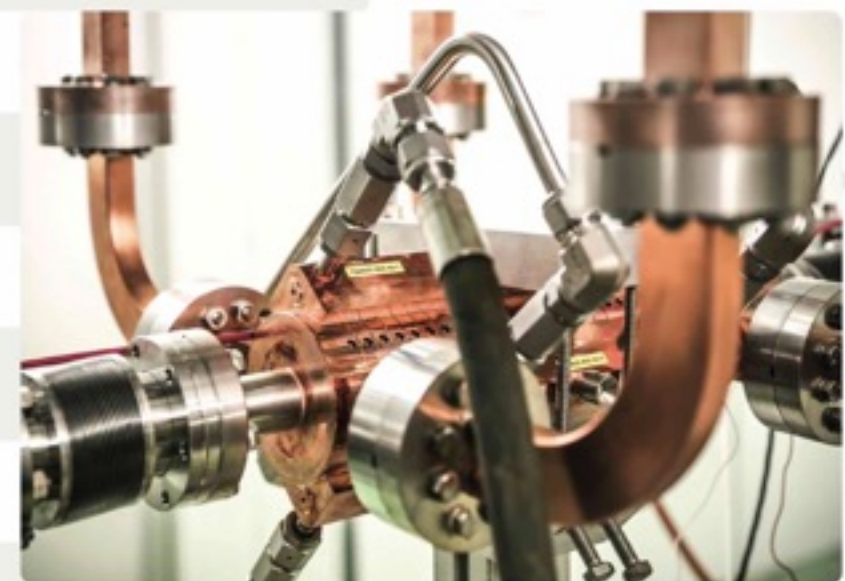
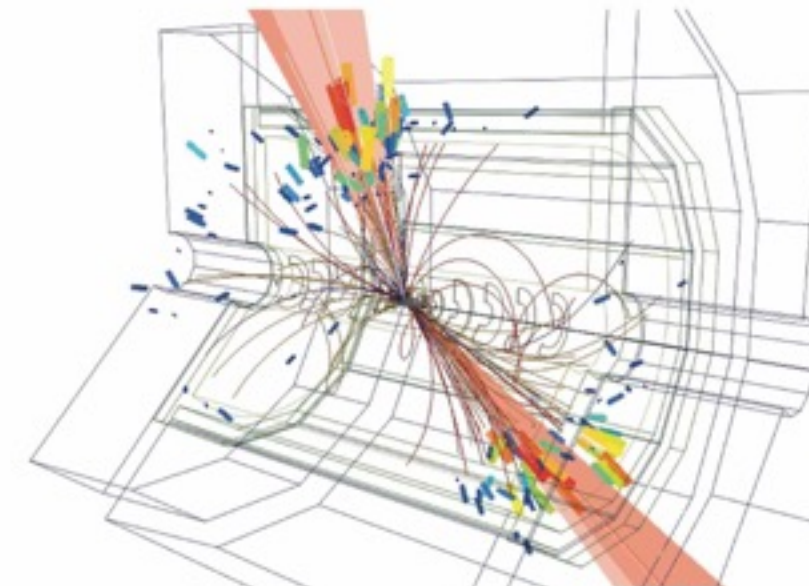
# Increased visibility - poster



## CLICWEEK2018

Compact Linear Collider Workshop

January 22 - 26, 2018 @ CERN



$e^+e^-$  collisions at the  
energy frontier!

[clicw2018.web.cern.ch](http://clicw2018.web.cern.ch)



# Increased visibility - stickers

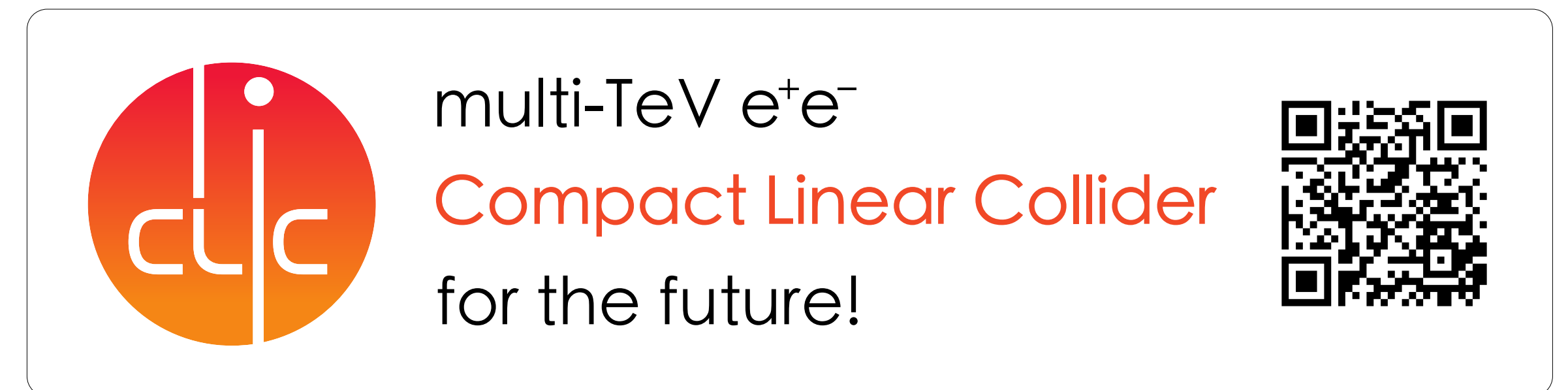
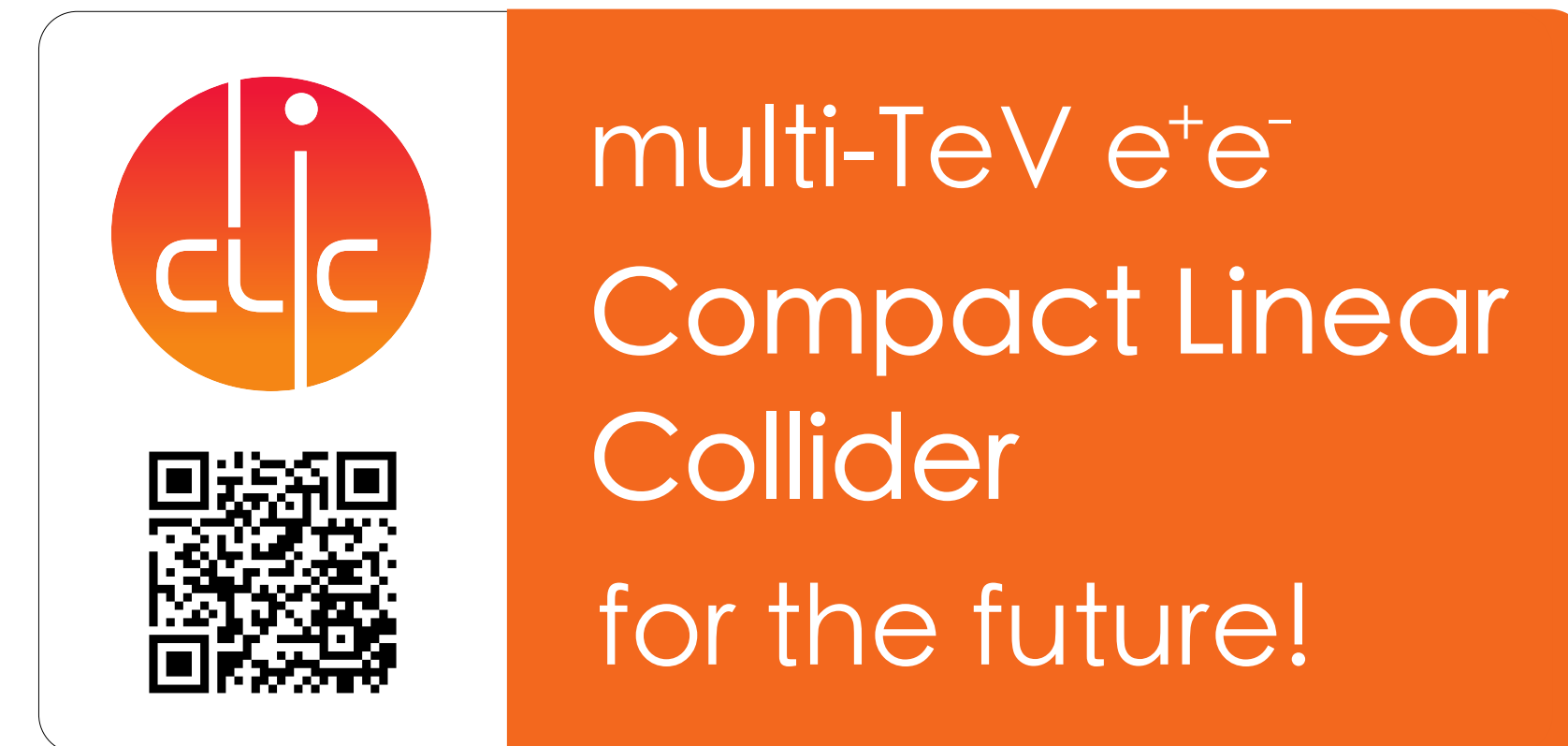


Logo stickers

**NEW sizes available at this workshop!**

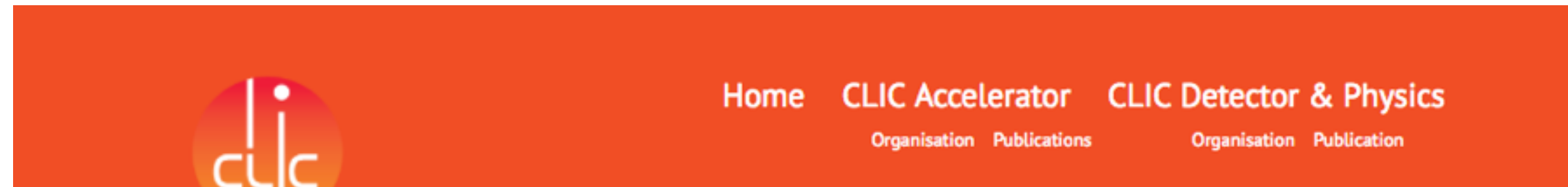


Door/Computer stickers with QR code





# New homepage - [clic.cern](http://clic.cern)



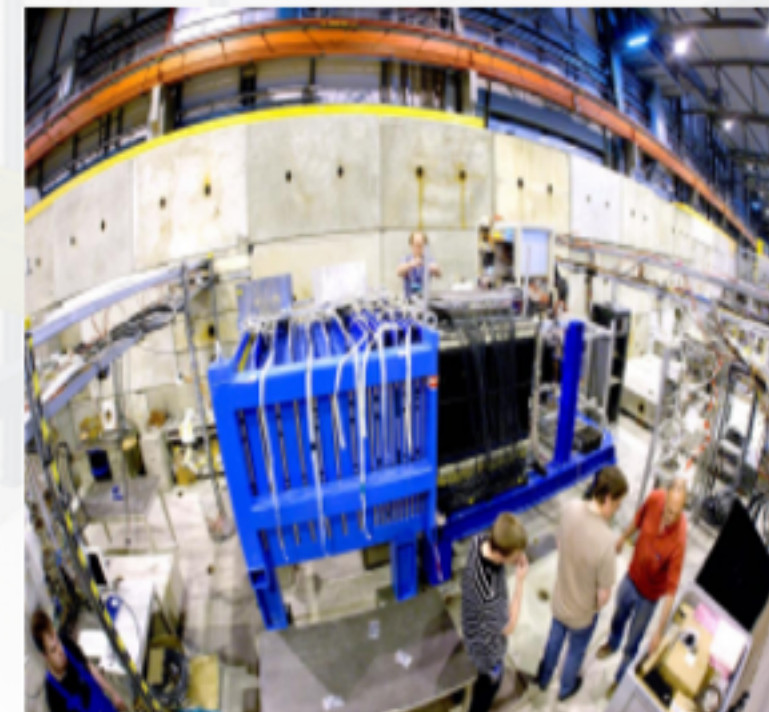
## Welcome to the Compact Linear Collider (CLIC) Project

The Compact Linear Collider (CLIC) is a concept for a future linear particle accelerator that aims to explore the next energy frontier. CLIC would collide electrons with positron and is currently the only mature option for a multi-TeV linear collider.

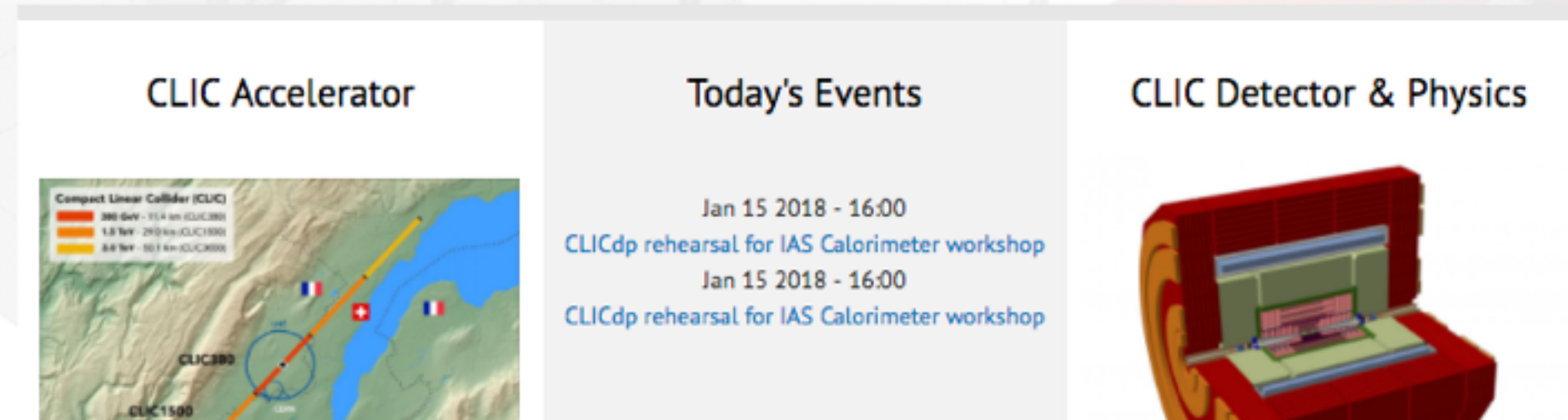
The accelerator would be between 11 km and 50 km long and is proposed to be built at CERN, across the border between France and Switzerland near Geneva, with first beams starting by the time the Large Hadron Collider (LHC) has finished operations around 2035.

The CLIC accelerator is based on a novel two-beam acceleration technique at an acceleration gradient of 100 MeV/m, and its staged construction would provide collisions at three centre-of-mass energies up to 3 TeV for optimal physics reach.

CLIC is a global project of more than 70 institutes in more than 30 countries. It consists of two collaborations: the CLIC detector and physics collaboration (CLICdp), and the CLIC accelerator study.



CALICE calorimeter prototype for CLIC HCAL



- **New joint portal** for entering the CLIC accelerator and CLICdp homepages
- Complies with the CERN style guide, principles, and rules for a .cern domain
- Please help us make this even better!
- More features can be added on request (at the moment a minimal portal to fulfil the requirements by CERN)
- Migration to Drupal 8 later this year

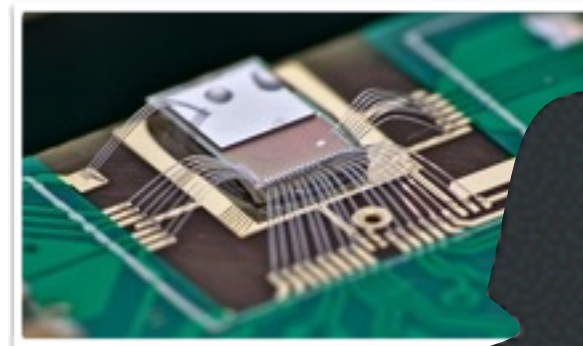


# Increased visibility - gallery in corridor 51



- Images showing **CLIC activities**
- CCI is preparing labels for each image explaining our activities and research areas
- Let us know if you are interested in making a **mini-gallery at your institution**

*Special thanks to:  
Dominik Dannheim, Eva  
Sicking, Simon Spannagel*





# CLIC Wikipedia page update



- Wikipedia is a web-based free-content encyclopedia project and is based on a model of **openly editable content**
- Wikipedia is written collaboratively by largely anonymous volunteers. **Anyone with Internet access can write and make changes to Wikipedia** articles (exceptions to this rule exists)
- The old CLIC wikipedia article was outdated and not objective
- CCI prepared a new text for the wikipedia page
  - Special thanks to Morag Williams (CERN-LCD)
- Jens Vigen at the CERN library agreed to help us upload the new text (ongoing effort)
- Everyone is encourage to help us keep this page up to date and as objective as possible

**Note: Wikipedia article updates are still ongoing**

A screenshot of the Wikipedia article titled 'Compact Linear Collider'. The page layout includes a left sidebar with navigation links like 'Main page', 'Contents', and 'Tools'. The main content area features the article title, a sub-header 'From Wikipedia, the free encyclopedia', and the beginning of the text describing the CLIC as a future linear particle accelerator. A table of contents is visible at the bottom of the article, listing sections such as 'Background', 'CLIC Energy Staging', and 'Design'. An image of the CLIC logo is also present on the right side of the article.

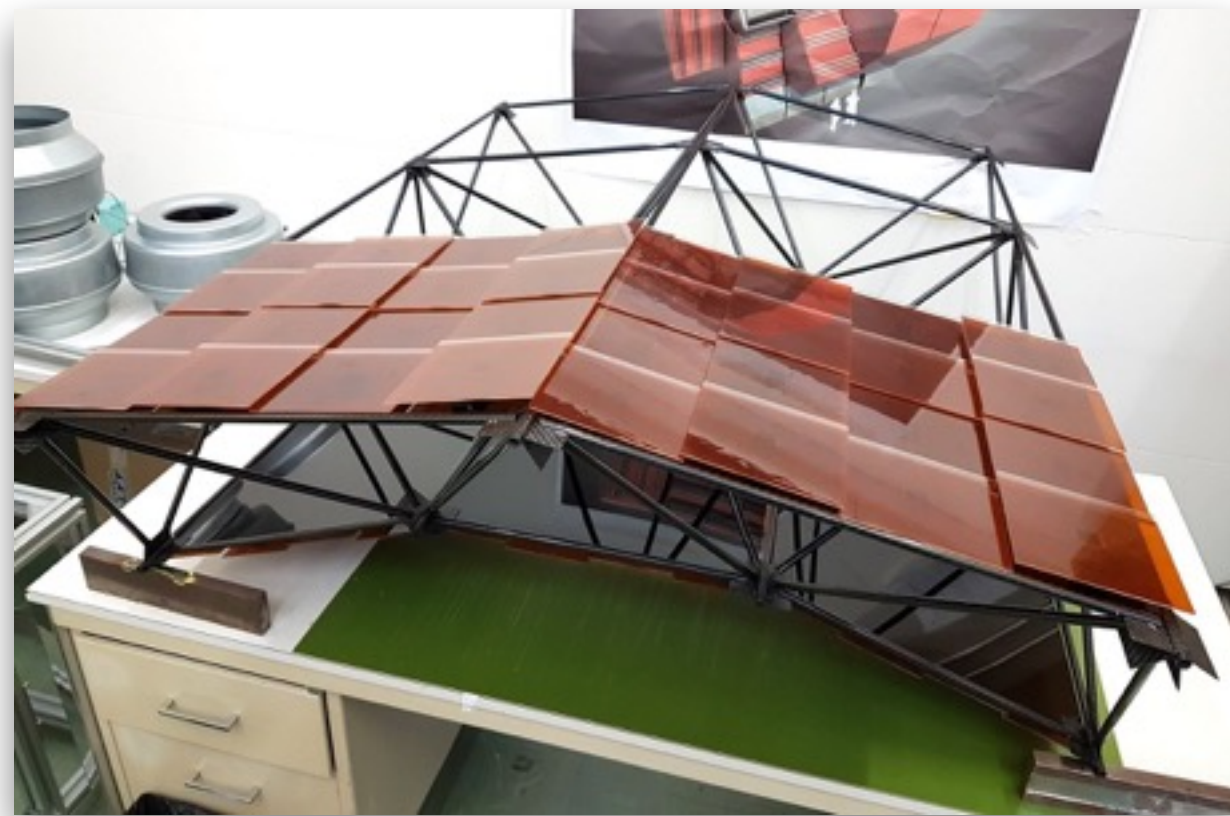


# CLIC showroom renewal

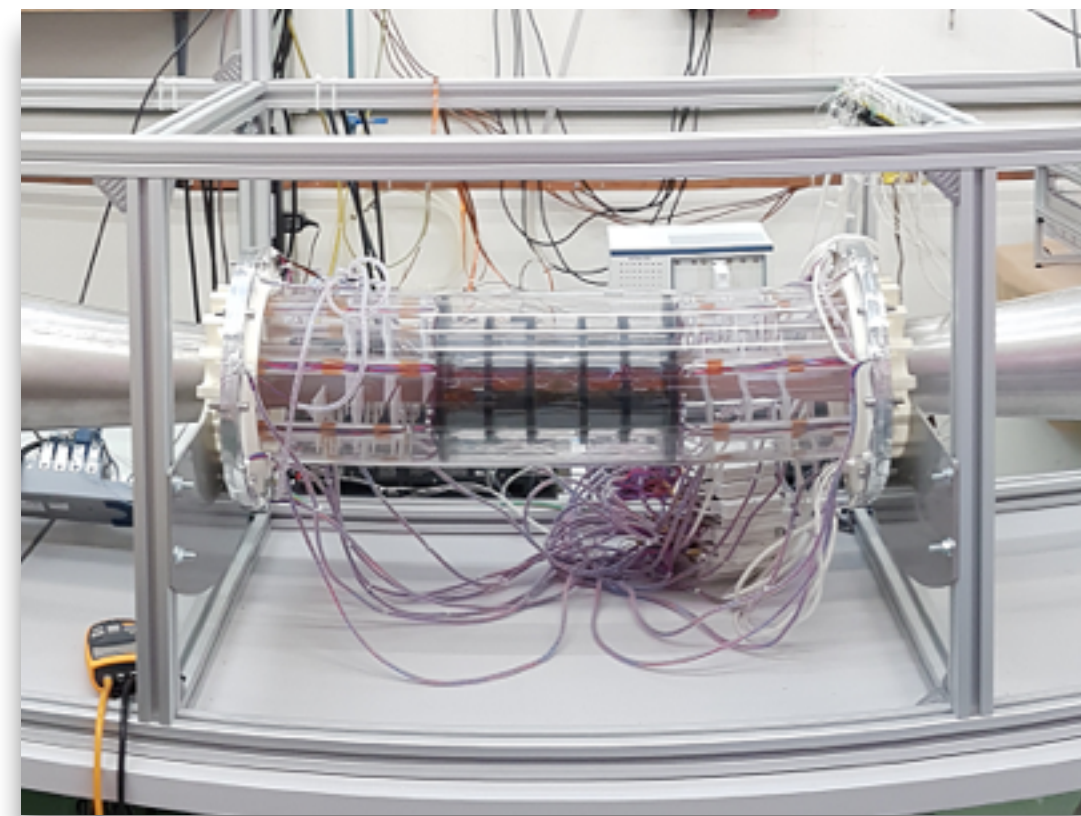


- Renewal of the CLIC showroom is ongoing:
- Complete CALICE AHCAL prototype plane: scintillator tiles, PCB, etc.
- Air-flow model of vertex detector
- Tracking detector support structure equipped with dummy sensor modules
- Two-beam module from CTF3, ...
- Working towards adding the showroom to the regular CERN tours

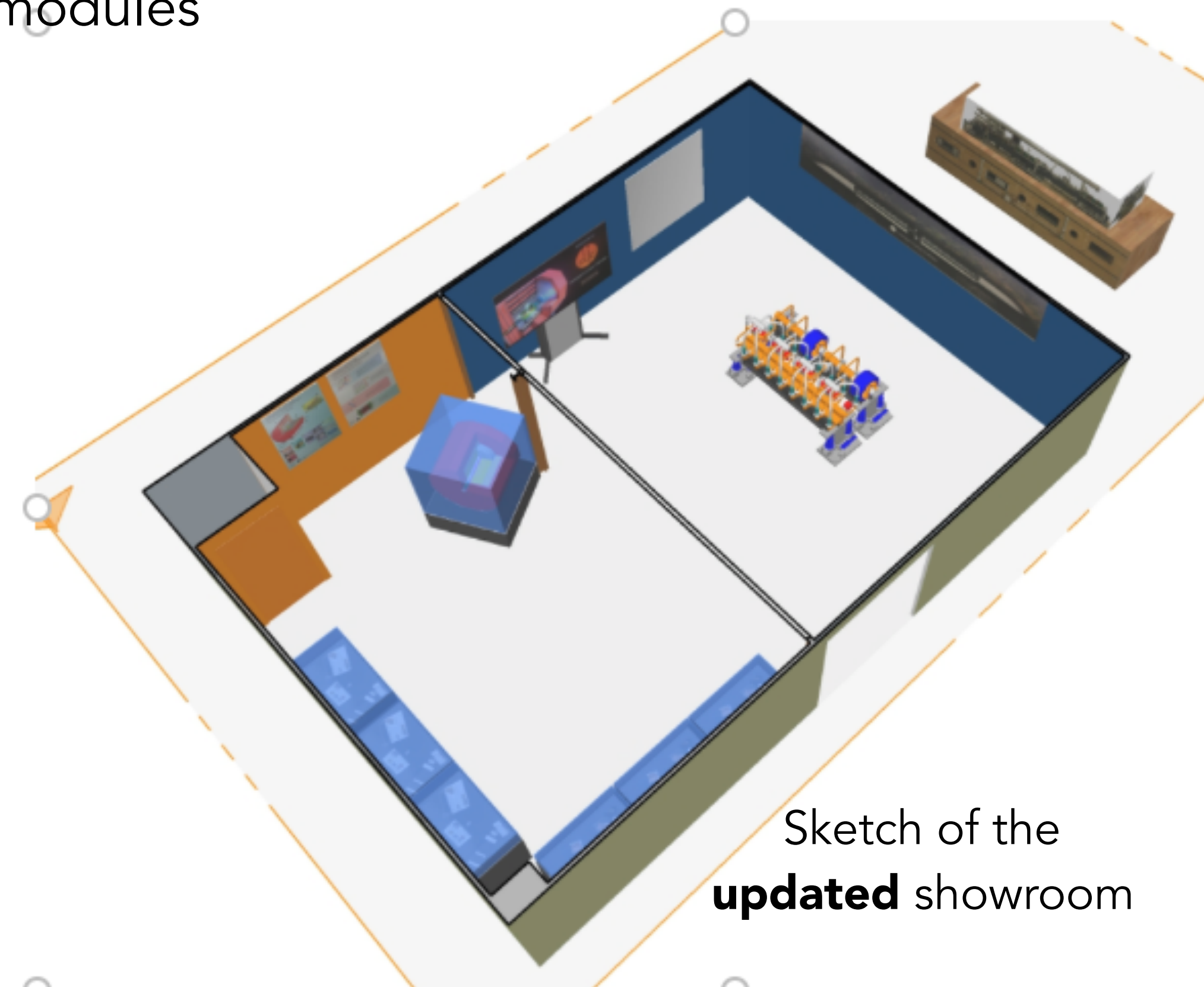
**Please visit the CLIC  
showroom soon to see all  
the new exhibition items!**



Tracking support structure



Vertex air-flow model



Sketch of the  
**updated** showroom



# Key statements about CLIC that you can use for your presentation



- **What?** Clear statements about the feasibility and the physics potential of CLIC
- For “decision-makers”, overview and public talks, but also for webpages and expert talks
- **Example titles:**
  - *“CLIC 380 GeV - A compact accelerator optimised for luminosity, power, and cost”*
  - *“CLIC can be expanded to 3 TeV and above with novel technologies”*
  - *“Physics programme at 380 GeV provide excellent coverage of the SM”*
  - *“Use of CLIC detector technologies for other applications”*
  - *“The landscape for new accelerator projects at CERN”*
  - ...

**Will soon be available in the CCI CERNBox!**



# Contact us



## Contact us if you have an idea on:

- How to make CLIC more visible
- An article about CLIC or other contribution
- Master/PhD students interested in CLIC
- ...

CLIC here to  
contact the CCI





# Additional slides



# CLIC in numbers



- Ongoing effort to make numbers available on who we are in terms of:
  - education research background,
  - institutions, universities,
  - nationalities,
  - diversity,
  - etc.
- Students and fellows: prior employer, where they went, what they ended up doing, how they succeeded in their careers, etc.
- Information handled on a statistical basis, divided into categories as used by the CERN management