

## I. **FCC Public event** on April 24, CERN Science Gateway [Link](#)

- Goal: inform the public about the project & listen their comments/complaints.
- Programme:
  - 10 mn welcome by Raphaël Bello
  - 20 mn presentation by Christophe Grojean: physics motivations
  - 40 mn presentation by Johannes Gutleber: feasibility study
  - 30 mn roundtable with FR and CH representatives: process in host states
  - 1h Q&A: all speakers + Michael Benedikt
- About 350 people in the room, 10 journalists/photoreporters + O(200) participants on live webcast
- Main fears/concerns addressed in the report
  - Lack of information/communication about the project
  - Environment impact: CO<sub>2</sub>, water, excavated material
  - Local impact: road traffic, accommodation...

**Very fruitful exchange with local population and local authorities**

# Few recent FCC outreach events



## II. Foire internationale de la Roche sur Foron: April 29 - May 8 [Link](#)

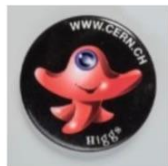


Science in the middle of booths selling swimming pools and tools for the garden

Many good and spontaneous interactions with the public who came by curiosity and without an opinion



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**FCC goodies**

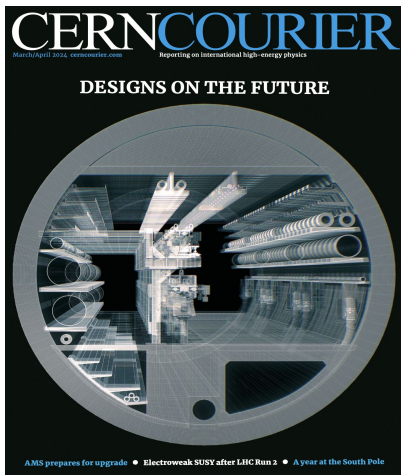
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FCC public information sheets

- CERN courier, issue of March/April 2024: “Design on the future”, <https://cerncourier.com/p/magazine/>

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**For the first time since the Fermi theory almost a century ago, particle physicists are voyaging into completely uncharted territory**

**FCC: THE PHYSICS CASE**

From understanding the structure of the elementary blocks of matter and the forces acting between them, to exhaustively probing the existence of new phenomena at low and high energies, the Future Circular Collider offers unique exploration of space, time and matter.

**THE POINT** A detector concept for FCC-ee, a collider operating at energies from 90 to 350 GeV

**PHYSICAL DIMENSION** An illustration of a detector for FCC-ee, which could represent the detection track for new particles

**ANALOGY** The power of FCC-ee to probe the Higgs boson and other SM particles in much higher resolution would allow physicists to peer further into the cloud of quantum fluctuations surrounding them. The combination of various new physics inputs and future colliders at CERN and elsewhere has the right of electrons' spin and momentum to interact with its own potential, but its origin and the nature of the interaction are unknown. The FCC is uniquely placed to address this mystery via a combination of per- and post-hoc measurements, using

with direct high-energy scattering, to comprehensively probe quantum-based explanations for the Higgs boson's self-coupling or the FCC would test whether the SM electroweak phase transition was first- or second-order. In testing the rate of equilibrium fluctuations necessary for creating the Higgs boson, the FCC would test the validity of the Higgs boson's mass, the precise structure of quark and lepton masses as well as the quark mixing angles in both within the SM and outside the SM. The power of FCC-ee to probe the Higgs boson and other SM particles in much higher resolution would allow physicists to peer further into the cloud of quantum fluctuations surrounding them. The combination of various new physics inputs and future colliders at CERN and elsewhere has the right of electrons' spin and momentum to interact with its own potential, but its origin and the nature of the interaction are unknown. The FCC is uniquely placed to address this mystery via a combination of per- and post-hoc measurements, using

be crucial to complete our understanding, with a potential to see on a new characteristic timescale offering the best sensitivity to the electron Yukawa coupling. Surprisingly, the FCC would sharpen understanding of the SM electroweak phase transition was first- or second-order. In testing the rate of equilibrium fluctuations necessary for creating the Higgs boson, the FCC would test the validity of the Higgs boson's mass, the precise structure of quark and lepton masses as well as the quark mixing angles in both within the SM and outside the SM. The power of FCC-ee to probe the Higgs boson and other SM particles in much higher resolution would allow physicists to peer further into the cloud of quantum fluctuations surrounding them. The combination of various new physics inputs and future colliders at CERN and elsewhere has the right of electrons' spin and momentum to interact with its own potential, but its origin and the nature of the interaction are unknown. The FCC is uniquely placed to address this mystery via a combination of per- and post-hoc measurements, using