FCC-ee webpage

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Yellow pages

⇛ The current (production) wepage:
`https://fcc-ee.web.cern.ch/`

⇛ The development wepage:
`https://test-d8-fcc-ee.web.cern.ch/`

HUGE thanks!!

A huge thanks to Andrea Stano, who was developing this page in the past!!!

Current look

Stay aware

- **3rd FCC physics workshop**The third FCC physics workshop took place in Geneva from 13 to 17 January 2020.
- **FCC Software Workshop and Hands-on Tutorial**The first FCC Software Workshop and Hands-on Tutorial took place in Geneva

The FCC-ee in a few words

The **FCC-ee**, **formerly known as TLEP**, is a high-luminosity, high-precision e^+e^- circular collider envisioned in a new 80-100 km tunnel in the Geneva area. With a centre-of-mass energy from 90 to 400 GeV, the physics program could pave the way towards the discovery of physics beyond the Standard Model, casting light on unanswered questions, such as dark matter, the baryon asymmetry of the Universe, the hierarchy problem, the stability of the Universe or the nonzero neutrino masses.

The FCC-ee project is part and parcel of the Future Circular Collider design study (FCC) at CERN, and would be the first step towards the long-term goal of a 100 TeV proton-

Next events

WG12: Beam Energy Calibration and Polarization
lepton beam polarization at EIC and FCC
Thursday, November 5, 2020 - 15:00

Conferences and Workshops
FCC November Week 2020
Monday, November 9, 2020 - 08:30

Newest developments

- The indico meetings are grouped into 3 categories:
  - Physics performance meetings
  - Conferences and workshops
  - Monthly physics meetings.

Stay aware

- **FCC-ee physics performance**Please see the upcoming Physics Performance meetings
- **FCC-ee monthly physics meetings** Please see the upcoming Physics meetings
- **FCC conferences and workshops** Please see the upcoming Physics conferences and workshops: Conferences & Workshops

Newest developments

- Next events:
  - Now they are long list.
  - Only future events show
  - Automatically generated from the indico.

The FCC-ee in a few words

The idea of a large circular e+e- collider as Higgs Factory came from a conjunction of circumstances: i) the need of a large tunnel for the continuation of the high energy exploration after the LHC; ii) the new 'nano-beam' designs proposed for the 'super' B factories; iii) and of course the discovery of the Higgs boson with a mass that could have been reached (with efforts) at LEPII. The idea of such a machine as a first step toward a 100TeV pp collider was submitted to the ESPP2013/13 and led to the FCC study, launched in 2014. The study concluded in its FCC-int submission to the ESPP2020 that the *"The most effective and comprehensive approach to thoroughly explore the open questions in modern particle physics is a staged research programme, integrating in sequence lepton (FCC-ee) and hadron (FCC-hh) collisions".*

The ESPP concluded: ***"Europe, together with its international partners, should investigate the technical and financial feasibility of a future hadron collider at CERN with a centre-of-mass energy of at least 100 TeV and with an electron-positron Higgs and electroweak factory as a possible first stage. Such a feasibility study of the colliders and related infrastructure should be established as a global endeavour and be completed on the timescale of the next Strategy update."***

The FCC-ee is a high-luminosity, high-precision e+e- circular collider. Two separate e+ and e- storage rings with very strong focusing, fed by a full size continuous injector, provide e+e- collision luminosities ranging from (per interaction point) 230 10^{34} /cm2 /s at the Z pole, 8 10^{34} /cm^2 /s at the ZH production maximum (240 GeV) and 1.7 10^{34} /cm^2 /s at the tt threshold and up to 365 GeV. Two to four interaction points are considered. The run plan of 15-20 years yields 5 10^{12} Z bosons, 108 W pairs, 1.3 10^6 Higgs bosons and 106 top quark pairs. Thanks to the availability of transverse polarization, the energy calibration

Next steps

⇛ The Organization card is starting to be updated.
⇛ Continue with updates of context. ⇛ Include the FCC talks on the main page.
⇛ Start Twitter account?

Please let us know your awesome idea!!!
All feedback for improvements is more then welcomed!

Many thanks to Alain, Patrick and Emmanuel for useful feedback!

Backup