VIEW FROM THE CERN COUNCIL

FCC WEEK LONDON
Eliezer Rabinovici, President of the CERN Council
5 JUNE 2023
CERN
The governance structure

Supreme Decision-Making Authority

COUNCIL

- Audit Committee
- External experts
- Finance Committee
- Scientific Policy Committee

Management structure

Director-General

- Legal Service
- Office of Data Privacy
- Health Safety Environment

Finance and Human Resources
- HR
- FAP
- SCE
- IPT

Accelerators and Technology
- TE
- BE
- EN
- SY

Research and Computing
- TH
- PRJ
- IT
- EP
- SIS

International Relations
- Stakeholder Relations
- Education, Communication & Outreach

Health Safety Environment
- Internal Audit
- Office of Data Privacy

Management structure

- Director-General

COUNCIL

- Legal Service
- Council support

Audit Committee

Finance Committee

Scientific Policy Committee

External experts

TREF

PFGB

FCC week - London 3
State and institutional participation in CERN

23 Member States:
1954 Belgium, Denmark, France, Germany, Greece, Italy, Netherlands, Norway, Sweden, Switzerland, United Kingdom, Yugoslavia

Pre-Stage to Membership: Cyprus (2016), Slovenia (2017), Estonia (2020)


Applications: Brazil

Observer States: Japan, United States of America (Russian Federation suspended March 2022)

Observer institutions: UNESCO, European Union, JINR
WHAT ARE THE OPTIONS?
European Strategy for Particle Physics (ESPP)

- First Strategy adopted by the Council in 2006 – bottom up No-brainer (LHC) - Orsay-Zeuthen - Lisbon
- First update adopted in 2013 - bottom-up Krakow-Erice-Brussels - HL-LHC, future vision (FCC, ILC, CLIC and others)
- Second update adopted 2020 – bottom-up Granada-Bad Honnef – CERN (Budapest)
- The ESPP update adopted by the Council in June 2020 called for:

   “a 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.”
CERN COUNCIL ALSO PROVIDES STABILITY

• OVER 25 YEARS 1998-2022, OVER 29 BILLION CHF (RINGS A BELL?)

• YEAR BY YEAR –FIXED AND INDEXED BUDGET. 100% PAID.

• STEPPING UP TO THE PLATE IN CHALLENGING POLITICAL AND FINANCIAL TIMES.

• WILLING TO CONTINUE TO PROVIDE LEADERSHIP BY CERN OFFERING THE BEST SCIENTIFIC AND TECHNOLOGICAL PROGRAM
CERN-PROVIDED SCIENCE

• ....ISR..SPS, Ppbar, LEP, LHC- 13.6 TEV, HL-LHC

• NEUTRAL CURRENTS-NEUTRINO (COLLABORATION WITH USA)

• W, Z, HIGGS – 67 NEW HADRONS INCLUDING PENTAQUARKS

• AMAZING PROGRESS IN ACCELERATOR TECHNOLOGY.

• AND YES, WWW...SUSTAINABILITY PROGRESS.
CERN TO PROVIDE THE BEST SCIENCE AND TECHNOLOGY ARENA.

• WHAT VISION? CONSIDERATIONS AND CONCERNS

• Scientific (Higgs and?)
• Technological (HL and High Field Magents)
• New Detectors
• Construction: Geology, Environment
• Financial
• ECRs?
• Politics and overlap issue.

THE FUTURE REQUIRES SCIENTIFIC AND TECHNOLOGICAL VISION.

EXCELLENCE IS EXTREMELY HARD TO ACHIEVE AND SO EASY TO LOOSE.
FCC FEASIBILITY STUDY
SPECIAL COUNCIL MEETING

2 FEBRUARY 2024

MID-TERM REVIEW
OF THE FEASIBILITY STUDY (FINAL 2025)

2027(?) - SEVEN YEAR LEAPS- NEXT STRATEGY GROUP MEETING – STARTING SOON