Réunion plenary-ECFA France

Composition

Activités RECFA

News sur l'évolution de la Collaboration FCC

Discussion sur la stratégie et sur les inputs des autres pays

Restricted ECFA Composition

Chair	Prof. Paris Sphicas	Appointed Jan. 2024
Secretary	Dr Lidija Zivkovic	Appointed July 2024
Members		
Austria	Dr Thomas Bergauer	Appointed Jan. 2024
Belgium	Prof. Nick van Remortel	Appointed July 2018
Bulgaria	Prof. Mariyan Bogomilov	Appointed July 2022
Croatia	Dr Dinko Ferencek	Appointed July 2024
Cyprus	Prof. Panos Razis	Appointed Oct. 2017
Czech Republic	Dr Zdenek Hubacek	Appointed Jan. 2025
Denmark	Prof. Mogens Dam	Appointed Jan. 2018
Finland	Prof. Panja Luukka	Appointed Jan. 2024
France	Dr Gregorio Bernardi	Appointed Jan. 2023
Germany	Prof. Heiko Lacker	Appointed July 2021
Greece	Prof. Dimitrios Sampsonidis	Appointed Jan. 2024
Hungary	Dr Ferenc Siklér	
Hungary Italy	Dr Ferenc Siklér Dr Sandra Malvezzi	Appointed Jan. 2021
		Appointed Jan. 2021
Italy	Dr Sandra Malvezzi	Appointed Jan. 2021 Appointed Jan. 2024
Italy Israel	Dr Sandra Malvezzi Prof. Eilam Gross	Appointed Jan. 2021 Appointed Jan. 2024 Appointed Jan. 2018
Italy Israel Latvia	Dr Sandra Malvezzi Prof. Eilam Gross Ms Anna Leiskaine	Appointed Jan. 2021 Appointed Jan. 2024 Appointed Jan. 2018 Appointed Jan. 2025
Italy Israel Latvia Lithuania	Dr Sandra Malvezzi Prof. Eilam Gross Ms Anna Leiskaine Prof. Grazina Tautvaisiene	Appointed Jan. 2021 Appointed Jan. 2024 Appointed Jan. 2018 Appointed Jan. 2025 Appointed Jan. 2025 Appointed Jan. 2025
Italy Israel Latvia Lithuania Netherlands	Dr Sandra Malvezzi Prof. Eilam Gross Ms Anna Leiskaine Prof. Grazina Tautvaisiene Prof. Jorgen D'Hondt	Appointed Jan. 2021 Appointed Jan. 2024 Appointed Jan. 2018 Appointed Jan. 2025 Appointed Jan. 2025 Appointed Jan. 2025
Italy Israel Latvia Lithuania Netherlands Norway	Dr Sandra Malvezzi Prof. Eilam Gross Ms Anna Leiskaine Prof. Grazina Tautvaisiene Prof. Jorgen D'Hondt Prof. Farid Ould-Saada	Appointed Jan. 2021 Appointed Jan. 2024 Appointed Jan. 2018 Appointed Jan. 2025 Appointed Jan. 2025 Appointed Jan. 2025 Appointed Jan. 2024

Romania	Dr Gabriel Stoicea	Appointed Jan. 2022
Serbia	Prof. Lidija Zivkovic	Appointed Jan. 2022
Slovakia	Dr Pavol Stríženec	Appointed May 2016
Slovenia	Prof. Marko Mikuž	Appointed July 2018
Spain	Prof. Celso Martinez Rivero	Appointed Jan. 2021
Sweden	Prof. Arnaud Ferrari	Appointed July 2023
Switzerland	Prof. Rainer Wallny	Appointed Jan. 2024
Türkiye	Prof. Erkcan Özcan	Appointed Jan. 2022
United-Kingdom	Prof. Daniela Bortoletto	Appointed July 2022
Ukraine	Dr Igor Kyryllin	Appointed July 2024
CERN	Dr Richard Hawkings	Appointed Jan. 2024

Ex-Officio Members		
CERN	Dr Fabiola Gianotti Prof. Joachim Mnich	Appointed Jan. 2016 Appointed Jan. 2021
LDG	Prof. Mike Seidel	Appointed Jan. 2025

Observers		
EPS-HEPP Board Chair	Prof. Fabio Maltoni	Appointed Aug. 2023
ApPEC Chair	Dr Carlos Pena Garay	Appointed Jan. 2025
NuPECC Chair	Prof. Eberhard Widmann	Appointed Dec. 2024
NuPECC Deputy Chair	Dr Barbara Erazmus	Appointed Dec. 2024
Early Career Researchers (ECR)	Dr Bruno Alves	Appointed Jan. 2025

Plenary ECFA Composition

Dr Gregorio Bernardi

Prof. Didier Contardo

Dr Marco Delmastro

Dr Arnaud Lucotte

Prof. Achille Stocchi

Dr Laurent Vacavant

Dr Claude Vallée

Dr Yves Sirois

Dr Jérôme Schwindling

Dr Barbara Erazmus Marcella Grasso

Dr Nathalie Besson

	Invited - Representatives from the European Large National Laboratory Directors Group (LDG)	
ſ	CEA / Irfu	Dr Franck Sabatié
1	CIEMAT	Dr Nicanor Colino Arriero
	DESY	Prof. Beate Heinemann
	IJCLab	Dr Achille Stocchi
	LN Frascati	Dr Paola Gianotti
	LN Gran Sasso	Dr Ezio Previtali
_	Nikhef	Prof. Jorgen D'Hondt
	PSI	Prof. Mike Seidel
	STFC-RAL	Prof. Sinead Farrington
	STFC-Daresbury Lab.	Prof. Jim Clarke
	Observers	
	President of Council	Prof. Costas Fountas
	Chair of the SPC	Dr Hugh Montgomery
	Chair of the FC	Dr Laurent Salzarulo
	Chair of NuPPEC	Prof. Eberhard Widmann
	Deputy Chair of NuPPEC	Dr Barbara Erazmus
	Chair of EPS-HEPP	Prof. Fabio Maltoni
	Chair of ApPEC	Dr Carlos Pena Garay
	U.S.A.	Prof. Young-Kee Kim
	EPS	Prof. Luc Bergé
	ESF	Dr Hans U. Karow
		Bruno Alves
		Patrick Dougan
	Early Career Researchers	Andrea Garcia Alonso
		Kevin Urquia
		Magdalena Vande Voorde

France

RECFA/PECFA meetings and Country visits

Friday: Country visit Saturday: restricted ECFA (RECFA) meeting

- 8-9 March 2024: Switzerland
- 16-17 May 2024: Sweden
- 13-14 Sep 2024: U.K.
- 29-30 Nov 2024: Serbia
- 7-8 March 2025: Bulgaria
- 30-31 May 2025: Finland

+ 2 Plenary ECFA meetings, one at CERN, one abroad (Frascati in 2024, Amsterdam 2026) and a session during the Summer HEP conference

Country visits

Friday: Country visit

- → Leads to a compact letter for the research ministry with the main messages and recommendations, and to a longer letter for the funding agencies.
- → Messages have often common points depending on the size of the community:

They tend to focus on the funding support, the personpower, the return at CERN, the availability of grants, the scientific program and how the choices are made, the local facilities, the relations universities/funding agencies, the conditions for the students and for the postdocs..

Large country: UK, Switzerland

Medium size country: Sweden, Finland

Smaller country: Bulgaria, Serbia

RECFA meetings

Saturday: RECFA meetings

- Review country visits, establish reports
- Propose and help set-up DRD collaborations
- Organize ECFA Higgs/Electroweak/Top workshops (3 editions, including one in Paris)
- Interacts with ECR
- Participate in the Organization of the European Strategy

Current and Future Events

- 3rd US-FCC workshop (15-17/04/25 ANL+FNAL)

- FCC week (19-23/05/25, Vienna)

- the ESPPU open symposium (23-27/06/26, Venice)



Open Symposium on the European Strategy for Particle Physics

	Monday	Tuesday	Wednesday	Thursday	Friday
09:00		Large-scale accelerator	Electroweak Physics	BSM	Overarching topics
	Opening Session	projects at CERN, part I	Talks (i), (ii)	Talks (i), (ii)	(by ESG Working groups)
			Discussion	Discussion	e.g. National input and others
[Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
11:15		Large-scale accelerator	Strong Interactions	Dark Matter / dark sector	Overarching topics (cont.)
	Parallel session I - IV	projects at CERN, part II	Talks (i), (ii)	Talks (i), (ii)	(by ESG Working groups)
			Discussion	Discussion	Closeout Session
13:00	Lunch Break				Closeout talk, final discussion
L		Lunch break	Lunch break	Lunch break	
14:00					
	Parallel session I - IV		Flavour	Detector Technologies	
15:00		Status in China, Japan, US	Talks (i), (ii)	status of DRDs, R&D needs,	ESG Meeting
			Discussion	timeline, required resources	
16:00	Parallel sessions V - IX	Coffee break	Coffee break	Coffee break	
		Accelerator Technologies	Neutrinos and Cosmic Messengers		
I	Coffee break	Status of critical item, R&D needs	Talks (i), (ii)	Status of critical item, R&D needs	
		timeline, required resources	Discussion	timeline, required resources	
	Parallel sessions V - IX				
[J		

19:15

9:00 - 10:45 Opening Session

16:45 - 19:15 Accelerator Tech. Parallel Sessions I - IV 11:15 - 13:00 Parallel I - IV, part I Lunch Break: 13:00 - 14:00 For each **Physics Block**: (i) Status, open questions (ii) How can they be addressed by the various projects (iii) Discussion 11:15 - 12:30 ESG Session II 12:30 - 13:30 Closeout session

14:30 - 16:30 ESG Meeting

14:00 - 15:30 Parallel I - IV, part II Very short break; 15:30 - 15:40 to change rooms 15:40 - 17:00 Parallel V - IX, part I 17:00 - 17:20 Coffee break 17:20 - 19:15 Parallel V-IX, part II

BESSON	Nathalie	CEA
BOBIN	Jerome	CEA
Baldisseri	Alberto	CEA IRFU, Université Paris-Saclay
Titov	Maksym	CEA Saclay, Irfu
Hamel de Monchenault	Gautier	CEA Université Paris-Saclay

490 participants

Participation française actuelle au Symposium

Bassler	Ursula	LLR - École Polytechnique/IN2P3
Boudry	Vincent	LLR – CNRS, École polytechnique, Inst
Porteboeuf Houssais	Sarah	LPCA
Teixeira	Ana M.	LPCA - Clermont (CNRS/IN2P3)
Malaescu	Bogdan	LPNHE, CNRS
BLONDEL	Alain	LPNHE, Paris, and DPNC, Geneva
Zito	Marco	LPNHE/IN2P3-CNRS
GASCON-SHOTKIN	Suzanne	Université Claude Bernard Lyon 1/IP2I
Marchiori	Giovanni	APC Paris (CNRS/IN2P3)

ROY	Christelle	CNRS
Courtin	Sandrine	CNRS & University of Strasbourg
Collot	Johann	CNRS – LPSC Université Grenoble Alp
Grasso	Marcella	CNRS-IN2P3
Boudoul	Gaelle	CNRS/IN2P3
Vacavant	Laurent	CNRS/IN2P3
Delmastro	Marco	CNRS/IN2P3 LAPP
Boumediene	Djamel	CNRS/IN2P3, Laboratoire de Physique
Djama	Farès	CPPM Marseille
Diaconu	Cristinel	CPPM, Aix Marseille University and C
Monteil	Stephane	FR/CNRS IN2P3 - Clermont University
Panebianco	Stefano Matthias	French Ministry of Research and Innov
Faus Golde	Angeles	IJCLab IN2P3-CNRS
Morange	Nicolas	IJCLab, CNRS/IN2P3
Winter	Marc	IJCLab/CNRS
Contardo	Didier	IP2I CNRS/IN2P3
Baussan	Eric	IPHC-IN2P3/CNRS
Dracos	Marcos	IPHC-IN2P3/CNRS



19-23 May 2025, Hofburg Vienna – Heldenplatz – 1010 Vienna, Austria

The Hofburg lies at the heart of Vienna's Old Town, the best way to reach it is by public transit. Two underground stations as well as bus and tram stops are all within walking distance. Motorists can park their vehicles at nearby car parks (for a fee).



2025 FCC Week

Copied from FCC Week 2024 in San Francisco

- D PED plenary session + 1 keynote presentation
- I summary talk

- 9 PED parallel sessions
- Of which 1 MDI, 1 EPOL
- ECR session
- Only in parallel with CB meeting

Registration fees

- Standard: 550 euros
- Student: 300 euros
- One-day pass: 150 euros
- Zoom: 30 euros

Day	Monday			Turondary						Wednesday					Thu	radey			Friday
Time	Phone	Peraliel 1	Paralisi 2	Paralisi 3	Paralisi 4	Ecord Room	Terry	Parallel 1	Parallel 2	Parallel 3	Parallel 4	Doord Room	Percep	Parallel 1	Parallel 2	Paralisi 3	Parallel 4	Doard Haom	(Pena
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17:00-17:30			1				M. Duradkt						Poster	_	4				
17,30-18,00			Early Career										3453227						
10:20:18:30			Neserchera	00									-						
10.30-19.05			J Keintzei	P Citomat (CEA)						veron Vienna									

To all work package coordinators (PProg, PPerf, DetCon, S&C, EPOL, MDI) - input needed by Feb. 20

- Please send suggestions for list of topics and speakers for the parallel sessions
- Any volunteer for the summary talk?

444 participants

Participation française actuelle faible à la FCC-week:

Nous essayons d'augmenter notre participation.

Chance	Antoine	FR-CEA, Commissariat à l'Energie Atomique et aux Energies Alternatives
Dalena	Barbara	FR-CEA, Commissariat à l'Energie Atomique et aux Energies Alternatives
Philippe	Chomaz	FR-CEA, Commissariat à l'Energie Atomique et aux Energies Alternatives
Bruant	Quentin	FR-CEA, Commissariat à l'Energie Atomique et aux Energies Alternatives

Miyazaki	Akira	FR-CNRS/IN2P3	
Maloizel	Alexis	FR-CNRS/IN2P3	
Korsun	Anna	FR-CNRS/IN2P3	
Alharthi	Fahad	FR-CNRS/IN2P3	
Angeles	Faus Golfe	FR-CNRS/IN2P3	
Boudoul	Gaelle	FR-CNRS/IN2P3	IP2I
Marchiori	Giovanni	FR-CNRS/IN2P3	
Bernardi	Gregorio	FR-CNRS/IN2P3	APC Paris
Chaikovska	Iryna	FR-CNRS/IN2P3	
Tamazirt	Juba	FR-CNRS/IN2P3	
Vacavant	Laurent	FR-CNRS/IN2P3	
Le Garrec	Maël	FR-CNRS/IN2P3	
Soos	Roxana	FR-CNRS/IN2P3	CERN
Monteil	Stephane	FR-CNRS/IN2P3	Clermont University
Mytrochenko	Viktor	FR-CNRS/IN2P3	
GOMEZ MARTINEZ	Yolanda	FR-CNRS/IN2P3	LPSC
WANG	Yuting	FR-CNRS/IN2P3	
Wu	Zhibo	FR-CNRS/IN2P3	
Huang	Zuchen	FR-CNRS/IN2P3	
Ghribi	Adnan	FR-GANIL	

3rd US-HF-FCC workshop FNAL/ANL

https://indico.fnal.gov/event/67484/timetable/#20250414.detailed

Day of parallel

sessions

Welcome by FNAL Director: Fermilab	Young-Kee Kim
One West	09:00 - 09:20
The FCC - Update	Michael Benedikt 🥝
One West	09:20 - 09:40
FCC Feasibility Study and pre-TDR	Guy Wilkinson 🥝
One West	09:40 - 10:05
FCC Accelerator	Frank Zimmermann 🥝
One West	10:05 - 10:30
FCC Detectors	Felix Sefkow
One West	11:00 - 11:25
FCC CB Matters	Gregorio Bernardi 🥝
One West	11:25 - 11:40
US HFCC PED Update	Srini Rajagopalan 0
One West	11:40 - 12:05
US HFCC-A Update	Stephen Gourlay 🥝

FCC-ee Physics Motivation and	Christophe Grojean 0
One West	14:00 - 14:20
Higgs Physics at FCC-ee	Zhen Liu 0
One West	14:20 - 14:40
Precision Physics at FCC-ee	Frank Petriello 0
One West	14:40 - 15:00
Flavor Physics at FCC-ee	Zoltan Ligeti 0
One West	15:00 - 15:20
LC Vision	Jenny List 0

FCC-ee Detector Challenges	Carl Haber 🥝
Auditorium, Building 402	09:15 - 09:40
US Proposed Subsystem Concept Panel	Bob Hirosky et al. 🥝
	_
Ultilizing New Technologies	Artur Apresyan 0
Auditorium, Building 402	11:00 - 11:25
Lessons Learned from LHC Detectors	Steve Nahn 🥝
Auditorium, Building 402	11:25 - 11:45
EIC Synergles	-Caroline aschenauer 🦉
Auditorium, Building 402	11:45 - 12:05
HL-LHC Reach and FCC-hh Programme	Heather Gray 🥝
Auditorium, Building 402	12:05 - 12:30

Accelerator Session Summar/Highlights	Tor Raubenheimer 🥝
Auditorium, Building 402	14:00 - 14:20
PED Session Summary/Highlights	Louise Skinnari 🥝
Auditorium, Building 402	14:20 - 14:45
Physics Session Summary/Highlights	Ian Low 🥝
Auditorium, Building 402	14:45 - 15:10
Workshop Closeout	Sarah Eno 🥝
Auditorium, Building 402	15:10 - 15:30

Status of the FCC Global Collaboration

Increasing international collaboration is a prerequisite for success: → links with science, research & development and high-tech industry will be essential to further advance and prepare the implementation of the FCC

38 Participating Countries

Austria – Belgium – Brazil – Canada – Chile – Colombia – Czech Republic – Denmark – Estonia – Finland – France – Georgia – Germany – Greece – Hungary – India – Iran – Italy – Japan – Latvia – Malta – Mexico – Netherlands – Norway – Pakistan – Poland – Portugal – Republic of Korea – Romania – Serbia – Spain – Sweden – Switzerland – Thailand – Türkiye – Ukraine – United Kingdom – United States of America

FCC Feasibility Study:

Aim is to further increase the collaboration, on all aspects, in particular on Accelerator and Physics/Experiments/Detectors



Next Steps in FCC Collaboration building, from the PED side

FCC project signs MoU, FCC-PED has National Contacts and Institute contacts.

To be more organized in PED, one of the issue is the different way the institutes/Universities are "registered":

Some have MoU's, some depend on a National Mou, some have an addendum to the MoU specifying the commitments, some have only informal registration

We have now a new possibility: Register the institutes under the FCC collaboration, to appear in the CERN Grey book, with a Team Leader (and possibly one or two Deputy Team Leader).

1) Develop "FCC WORLDWIDE" (cf. FCC-PED-WEB.CERN.CH) to better define the overall international organization, for FCC at large (MoU's) and for FCC-PED (via the Grey book, see below)

2) have the current PED institutes to register in the Grey Book, with a TL and possibly a DTL.

3) Obtain from the TL/DTL the expertise of the lab, and the activities in which the institute is involved and wants to be involved. This will allow to have a better estimate of the forces to realize the FCC projects

Example of FCC teams in the Grey book

Institute Name	Institute Parent Name	Town	Country	ry Team Leader & Deputy Team Leader(s)	
Department of Physics	University of Tehran	Tehran	Iran	(TL) AZIZI, KAZEM	
Department of Physics	University of Zurich	Zurich	Switzerland	(TL) CANELLI, FLORENCIA MARIA (DTL) KILMINSTER, BENJAMIN JOHN (DTL) MACCHIOLO, ANNA	
Institut Pluridisciplinaire Hubert Curien	Centre National de la Recherche Scientifique	Strasbourg	France	(TL) EL BITAR, ZIAD (DTL) GOFFE, MATHIEU	
LAPP-Laboratoire d'Annecy de Physique des Particules	Centre National de la Recherche Scientifique	Annecy-Le-Vieux	France	(TL) LAMANNA, GIOVANNI (DTL) BRUNETTI, LAURENT	
Laboratoire APC - Astroparticules et Cosmologie	Centre National de la Recherche Scientifique	Paris	France	(TL) BERNARDI, GREGORIO (DTL) MARCHIORI, GIOVANNI	
Laboratori Nazionali di Frascati	INFN e Laboratori Nazionali di Frascati	Frascati	Italy	(TL) BOSCOLO, MANUELA	
Particle Accelerator Physics Laboratory (LPAP-IPEP)	EPFL - Ecole Polytechnique Federale Lausanne	Lausanne	Switzerland	(TL) PIELONI, TATIANA	
Sezione di Bologna INFN	Universita e INFN, Bologna	Bologna	Italy	(TL) GIACOMELLI, PAOLO	
Sezione di Napoli (INFN)	University Federico II and INFN, Naples	Naples	Italy	(TL) PAOLUCCI, PIERLUIGI (DTL) IORIO, ALBERTO ORSO MARIA	
Sezione di Padova	Universita e INFN, Padova	Padua	Italy	(TL) AZZI, PATRIZIA	
Sezione di Pavia	Pavia University and INFN	Pavia	Italy	(TL) BRAGHIERI, ALESSANDRO (DTL) GAUDIO, GABRIELLA	
Universita & INFN Pisa		Pisa	Italy	(TL) PALLA, FABRIZIO (DTL) BEDESCHI, FRANCO	
Universita degli Studi di Udine		Udine	Italy	(TL) PANIZZO, GIANCARLO	
Universita e INFN, Ferrara		Ferrara	Italy	(TL) CIBINETTO, GIANLUIGI	
VINCA Institute of Nuclear Sciences	University of Belgrade	Belgrade	Serbia	(TL) PANDUROVIC, MILA (DTL) HADRE, JULIE	

Discussion les résultats des inputs, et sur les next steps

	Category	arXiv, or alternative, link	ESPPU #	ESPPU link
Belgium national input	national input		257	https://indico.cern.ch/event/1439855/cont
Brazil national input	national input	https://arxiv.org/abs/2503.24295	194	https://indico.cern.ch/event/1439855/cont
Canadian 'pre-submission'	national input		248	https://indico.cern.ch/event/1439855/cont
Croatia national input	national input		59	https://indico.cern.ch/event/1439855/cont
Czech national input	national input		41	https://indico.cern.ch/event/1439855/cont
Danish input	national input		277	https://indico.cern.ch/event/1439855/cont
French national input	national input		15	https://indico.cern.ch/event/1439855/cont
French QCD input	national input		5	https://indico.cern.ch/event/1439855/cont
Estonian national input	national input		195	https://indico.cern.ch/event/1439855/cont
Finland national input	national input		206	https://indico.cern.ch/event/1439855/cont
German national input	national input		22	https://indico.cern.ch/event/1439855/cont
German hadron and nuclear input	national input		183	https://indico.cern.ch/event/1439855/cont
Greek national input	national input		136	https://indico.cern.ch/event/1439855/cont
Hungarian national input	national input		14	https://indico.cern.ch/event/1439855/cont
Israeli national input	national input		10	https://indico.cern.ch/event/1439855/cont
Israeli national input - clarifications	national input		39	https://indico.cern.ch/event/1439855/cont
Italy INFN CSN1 input	national input		62	https://indico.cern.ch/event/1439855/cont
Italy 'initial' INFN input	national input		208	https://indico.cern.ch/event/1439855/cont
Italy INFN nuclear and hadron input	national input		76	https://indico.cern.ch/event/1439855/cont
Japan national input	national input		99	https://indico.cern.ch/event/1439855/cont
Latin American survey	national input		88	https://indico.cern.ch/event/1439855/cont
Lithuanian national input	national input		83	https://indico.cern.ch/event/1439855/cont
Netherlands national input	national input		173	https://indico.cern.ch/event/1439855/cont
Norwegian national input	national input		177	https://indico.cern.ch/event/1439855/cont
Pakistan national input	national input		169	https://indico.cern.ch/event/1439855/cont
Polish national input	national input		16	https://indico.cern.ch/event/1439855/cont
Portugese national input	national input		45	https://indico.cern.ch/event/1439855/cont
Romanian national input	national input		193	https://indico.cern.ch/event/1439855/cont
Slovak national input	national input		31	https://indico.cern.ch/event/1439855/cont
Serbia national input	national input		106	https://indico.cern.ch/event/1439855/cont
Swedish national input	national input		110	https://indico.cern.ch/event/1439855/cont
Spanish national input	national input		147	https://indico.cern.ch/event/1439855/cont
Swiss national input	national input		64	https://indico.cern.ch/event/1439855/cont
Ukrainian national input	national input		47	https://indico.cern.ch/event/1439855/cont
UK national input	national input		176	https://indico.cern.ch/event/1439855/cont
US HFCC input to ESPPU	national input	https://indico.global/event/14344/	202	https://indico.cern.ch/event/1439855/cont
US national input	national input	https://arxiv.org/abs/2504.01804	230	https://indico.cern.ch/event/1439855/cont
ECR input	ecrs	https://arxiv.org/abs/2503.19862	42	https://indico.cern.ch/event/1439855/cont

Question: What is the preferred next major/flagship collider for CERN ?

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Country ALL	FCC (any) 30	FCC-ee	FCC-ee then hh FCC-hh.o	direct Mu-coll	LC@CERN 1	LEP3 0	None 3	
Austria	1		1					FCC not clearly named (but they want QCD and Flavour in the e+e- colli
Brazil	1							LCF smaller cost, higher energy
Belgium	1		1					
Bulgaria								Did not submit a national input (Member state)
Canada							1	No recommendation in their contribution
Croatia	1							
Cyprus								Did not submit a national input (Associate member state)
Czech Rep.	1		1					
Denmark	1		1					
Estonia	1		1					
Finland	1		1					
France	1	1	1					
Germany Greece	1	1	1					
Hungary	1	1	1					
India	•							Did not submit a national input (Associate member state)
INFN	1		1					INFN top management
Israel	1	1						
Italy	1		1	· · · · ·				Italian HEP community (Gruppo 1)
Japan					1			Highest priority is ILC in Japan (not in the question). They do not expli
Latvia								Did not submit a national input (Associate member state)
Lithuania	1		1					No firm recommendation, circular e+e- collider could be the preparator
Netherland	•							
	4							1 Main document: no preference, wait for ESG. ECR: Divided votes, CL
Norway Pakistan	1		1					
	1							Name "HE-LHC" at the same level as "FCC" - maybe wanted to say "H
Poland	1		1					Signed by Zarnecki. LCF is second priority
Portugal	1							
Romania	1		1					
Serbia	1		1					
Slovakia	1		1					
Slovenia	1		1					
Spain	1		1					
Sweden	1		1					
Switzerland	1		1					
Türkiye								Did not submit a national input (Associate member state)
Ukraine	1		1					
United Kingdom	1		1	1				Only FCC tunnel recommended. Large contingents for FCC int and for
United States	1		1					LC Vision with 4xL needs technical review. US has another contributio

Position of big countries on options B, if option A is not feasible

UK:

If FCC is unaffordable or technically unfeasible: In this case, a Linear Collider Facility is an less expensive alternative route to an e+e- Higgs factory at CERN, can be realised on the same timescale or even sooner, and provides attractive possibilities for future energy upgrades.

If CEPC is realized promptly: In this case, efforts could be increased to realise FCC-hh on a shorter timescale; discussion would be needed on the technical roadmap required and the commercial availability, cost, and field-strength of magnets, and the corresponding collision energies that could be achieved. An alternative would be to build a Linear Collider Facility at CERN with initial collision energy > 500GeV, as a complementary facility to CEPC.

If major non-European collider projects proceed then the UK community would wish to collaborate on them. However, the next flagship collider at CERN should be complementary to major efforts elsewhere, and not an identical type of project.

The scenario of ILC being pursued in Japan will be further discussed in the April meeting. We decided to postpone any prioritisation of alternative options until the next community meeting on 28th April when additional information will be available

ITALY: No option B given, concentrate on option A. Irrespective of competing projects worldwide, ensuring that Europe remains at the forefront of HEP. If highly pressing geopolitical situation, we may proceed directly with the construction of the hadronic FCC-hh (skipping FCC-ee),

GERMANY: If China proceeds with CEPC on the announced timescale, physics results from this machine are expected to become available about 10 years earlier... **CERN then has to aim for a complementary and competitive next flagship collider project at higher energies: either a hadron collider** with magnet technology expected to be available at the end of the HL-LHC, **installed in a tunnel of about 90 km circumference, or a linear e+e- collider facility with a centre-of-mass energy of initially at least 550 GeV** If financial problem for FCC: **an e+e- Linear Collider is an attractive alternative path towards a Higgs factory.**

US: Given the uncertainty in the execution of any plan and the scope of international participation, a **CEPC inclusion in the next 5-year Plan of China should not immediately influence the ESG recommendations or CERN's direction to proceed with FCC-ee**. The developments in China should be carefully monitored over the next several years and an appropriate strategy should be developed should China demonstrate its intent to move forward with CEPC construction.

FRANCE (community)

If the construction of an $e_{+}e_{-}$ collider comparable to the FCC_{ee} is not firmly established outside of Europe:

- In absence of FCC-ee, a linear e+e- collider facility (LCF) at CERN would be the next best option for a Higgs factory. Somewhat limited statistics at the HZ cross-section peak and a much smaller luminosity at the Z-pole are in part compensated by the possibility to reach at least √s = 500 GeV, allowing a clean observation of the e+e- → vvH process, of the top threshold, and a first determination of the Higgs-boson self coupling.
- Energies of √s = 1−3 TeV, as enabled by CLIC technology, would significantly improve these measurements and allow detailed studies of vector-boson scattering. The LCF program could be complemented by a dedicated, high-luminosity Z factory, possibly re-using existing infrastructure at CERN.
- As a last-resort fall-back, LEP3 offers an instantaneous luminosity five times less than FCCee and an energy range limited to about Vs = 240 GeV.

If the construction of an e+e- collider comparable to the FCCee is firmly established outside of Europe, and ahead in schedule:

- The LCF would provide sufficient scientific complementarity only if it covers the entire energy range between the tt⁻ production threshold and the TeV scale on a reasonable timespan.
- Or, the strategy could be the earlier development of a high-energy hh/eh program, ideally in a 91km tunnel@vs=85 TeV
- If a new tunnel is not feasible, a collider such as the HE-LHC could be a fallback alternative...
- Both the FCC-hh and the HE-LHC should be complemented by an electron-hadron collider such as the LHeC....it could run in the early 2040's and use improved acceleration techniques based on ERL that will help achieve the sustainability requirements and benefit to future e+e- colliders.

Are we happy with this non prioritizations?

Should the community or the funding agencies try to do more prioritization for option B and update or submit their input ?

If yes, how ? (The other large countries have all scheduled an additional community meeting to make an update for the 26th of May

There is also the potential to make more updates after Venice, but their impact will be small.