

Reunion FCC-contacts



📅 vendredi 13 juin 2025, 09:00 → 10:30 Europe/Paris

09:00 → 09:30 **News + FCC-contacts. Evolution vers la phase pre-TDR**

🕒 30m



Orateur: Gregorio Bernardi (APC Paris CNRS/IN2P3)

09:30 → 09:50 **Feedback de l'IN2P3 et CEA sur la question de l'option b en préparation de Venise + discussion**

🕒 20m



09:50 → 10:15 **Next steps / Tour de table des Eol et des différentes contributions**

🕒 25m



Orateurs: Catherine Biscarat (L2I Toulouse, CNRS/IN2P3, Université de Toulouse), Farès Djama (CPPM), Gaelle Boudoul (IP2I/AICP (CNRS/IN2P3)), Giovanni Marchiori (APC Paris), Jean-Baptiste De Vivie De Regie, Luc Poggioli (LPNHE Paris), Marco Delmastro (LAPP), Nicolas Morange (IJCLab), Stephane Monteil (Laboratoire de Physique de Clermont - UCA/IN2P3), Suzanne GASCON-SHOTKIN (IP2I Lyon/Université Claude Bernard Lyon 1), Vincent BOUDRY (LLR - CNRS, École polytechnique/IPP Paris), Ziad EL BITAR (IPHC)

- News de FCC et de l'IN2P3. Greybook / Jamboree
- Feedback de l'IN2P3 et CEA sur la question de l'option b en préparation de Venise + discussion
- Tour de table des news des EoI Françaises

- Bilan des ressources 2025, demande de ressources pour 2026.
 - Préparation du prochain FCC France du 12 au 14 Novembre à Paris.
 - Discussion sur France-Italie en 2026

- FCC pillar coordinators met in the Intercity Hotel yesterday to discuss the FCC “pre-TDR” phase organisation. Discussions that took place are confidential.
- We tried to propose “pre-Approval” instead of “pre-TDR” (confusing, as we – PED – are not aiming at a TDR during this phase), but were informed that the words “pre-TDR” already exist in some official Council documents
- All pillar coordinators were requested to present their priorities, deliverables, and milestones during the pre-TDR phase. The request came on Friday evening prior to the long Pentecôte weekend. Some of you were contacted for inputs, but the outcome for PED was not discussed with the PED coordination group.
- To all WP coordinators: please look at the [PED presentation](#), amend the priorities and deliverables, and complete the various aspects with milestones - by the next PED Coordination meeting. Note: some of the priorities will need interface between different WP (inside or outside PED)

PED priority items for the pre-approval phase

1. Lay the foundations for the conceptual design studies of four (or more) detectors
2. Consolidate IR layout, detector integration, and related background mitigation
3. Collaborate with IT to develop a computing architecture model for experiments
4. Complete the software & analysis toolkit to ease detector performance comparison
5. Confirm, with full analyses, the current uncertainty estimates on EWPOs (Z and W)
6. Gather the worldwide theory community to address the theoretical challenges
7. Streamline and optimise the procedure for centre-of-mass energy calibration
8. Develop an efficient PED Education/Communication/OutReach/InReach strategy
9. Ascertain the detector cost estimate
10. Articulate the physics case, feasibility, and schedule implications of other \sqrt{s} stages
11. Anticipate FCC-PED structure and management in the project phase (2027-2033)₁₆

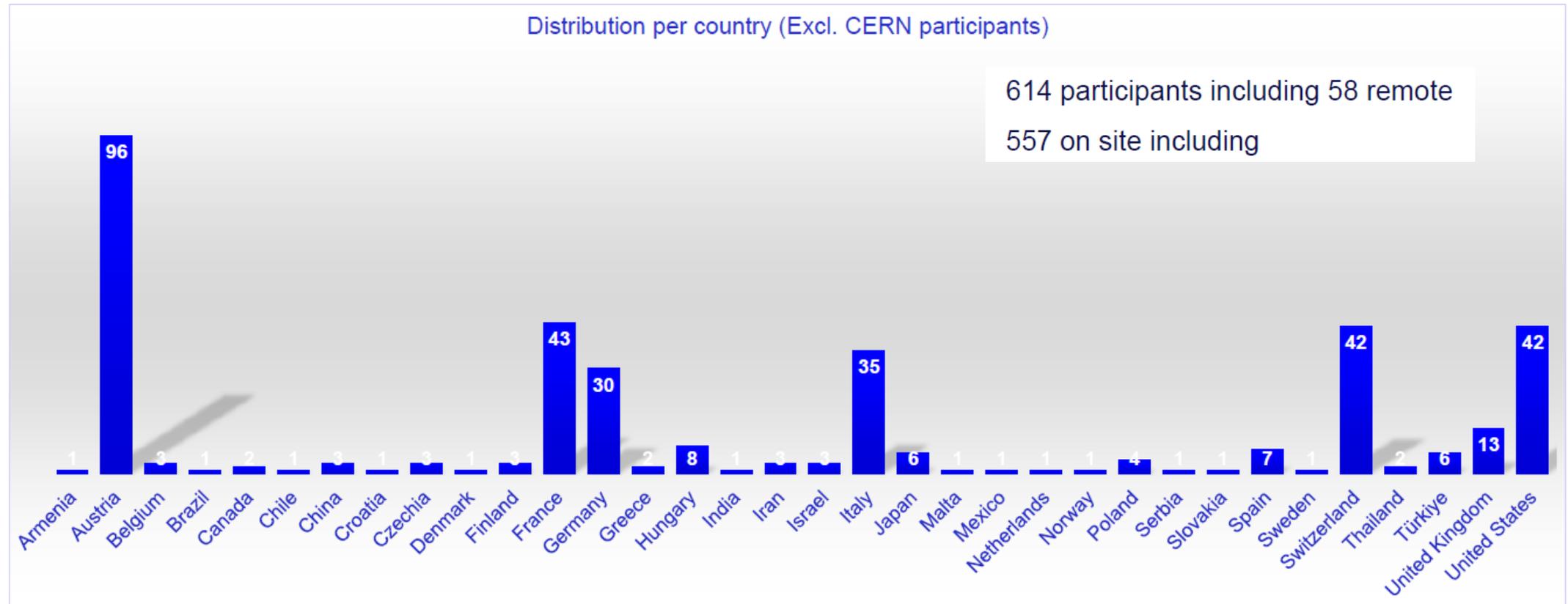
Recent and Future Events

- FCC week (19-23/05/2025, Vienna)
- r-ECFA visit to Finland (30/05/2025, Helsinki)
- ESPPU open symposium (23-27/06/2025, Venice)

Version: 2.0		Date: 20.05.2025																		
Day	Monday	Tuesday					Wednesday					Thursday					Friday			
Time	Plenary	Parallel 1	Parallel 2	Parallel 3	Parallel 4	Board Room	Plenary	Parallel 1	Parallel 2	Parallel 3	Parallel 4	Board Room	Plenary	Parallel 1	Parallel 2	Parallel 3	Parallel 4	Board Room	Plenary	
Room	Zeremoniensaal (472 p.)	Geheime Ratstube (146 p.)	Rittersaal (158 p.)	Trabantenstube (96 p.)	Künstlerzimmer (77 p.)	Radetzky Ap.1 (30 p.)	Zeremonienaal (500 p.)	Geheime Ratstube (146 p.)	Rittersaal (158 p.)	Trabantenstube (96 p.)	Künstlerzimmer (77 p.)	Radetzky Ap.1 (30 p.)		Geheime Ratstube (146 p.)	Rittersaal (158 p.)	Trabantenstube (96 p.)	Künstlerzimmer (77 p.)	Radetzky Ap.1 (30 p.)		Zeremoniensaal (472 p.)
08:00-08:30	Welcome coffee	Welcome coffee					Welcome coffee					Welcome coffee					Welcome coffee			
08:30-09:00	1. Welcome remarks 2. Welcome and introduction 3. FCC: a view from CERN council 4. Opening remarks and Perspectives from Austrian Academy of Science 5. Practical information 6. Concience photo	Physics Case and Theory calculations	Baseline Optics	Electricity & Energy Management	Environment (i)		Physics Perf. & Detector Req.		FCC-ee Injector Overview	Magnets and power conversion	SRF - Directions for R&D		Machine Detector Interface (i)	SRF - Technology (III)	Integration and Radiation	Synergies and innovation (i)	HTS Coated Conductors		1. FCC-hh and HFM 2. Civil Engineering 3. Technical infrastructure 4. Injector & Booster 5. Accelerator 6. Accelerator R&D including RF	
09:00-09:30		J. Gluza (U.S. Katowice)	I. Agapov (DESY)	N. Bellegarde (CERN)	S. Kleiner (CERN)		D. Elvira (FNAL)	Industry & Technology Day, Keynotes	M. Boland (USASK)	S. Rimjaem (CMU)	S. Belomestnykh (FNAL)		F. Palla (INFN)		S. Bartolome (CERN)	D. Martin (ESRF)	S. Calatroni (CERN)			
09:30-10:00		Coffee Break					Coffee Break					Coffee break					Coffee break			
10:00-10:30		Coffee Break					Coffee Break					Coffee break					Coffee break			
10:30-11:00	Coffee break	Physics Case and Theory calculations	Alternative Optics	RF Points and Cryogenics	Environment (ii)	CHART	Software and Computing	The value of Big Science	FCC-ee INJ Linac and Damping Ring	Vacuum	SRF - Technology (I)		Machine Detector Interface (ii)	FCC-hh accelerator Optics baseline	Safety	Synergies and innovation (ii)	HTS Coated Conductors		1. EPOL 2. MDI 3. Physics 4. Detectors 5. Early Career Researchers	
11:00-11:30		V. Del Duca (INFN)	A. Faus-Golfe (JCLab)	F. Gerigk (CERN)	B. Delille (CERN)	M. Benedikt	G. Ganis (CERN)	R. Crescenzi (LSE)	J. Seeman (SLAC)	F. Djarabekova (U. Helsinki)	C. Pira (INFN)		A. Drees (BNL)	V. Shiltsev (NIU)	B. Delille (CERN)	G. Lamanna (LAPP)	S. Calatroni (CERN)			
11:30-12:00	1. Key note: From HL-LHC to FCC 2. FCC Feasibility Study status 3. FCC Collaboration status																			
12:00-12:30																				
12:30-13:00																				
13:00-13:30	Lunch break																			
13:30-14:00		Detector concepts	Tuning and Operations	Civil Engineering (i)	Environment (iii)		Physics Performance & Detector Req.	WKO Industry session	FCC-ee INJ Booster and transfer lines	Injection & Instrumentation	SRF - Technology (II)		EPOL (i)	FCC-hh High Field Magnets (i)	Cooling & Ventilation, Geodesy	Beam Interception Devices				
14:00-14:30		M. Dam (NBI)	R. Tomas (CERN)			FCC FS Steering Committee	P. Azzi (INFN)	P. Sagmeister	J. Weninger (CERN)	S. White (ESRF)	U. Van Rienen (UROS)		A. S. Müller (KIT)	P. Vedrine (CEA)	I. Ruehl (CERN)				Scientific Advisory Committee meeting	
14:30-15:00	1. Implementation Scenario 2. Civil Engineering 3. FCC Accelerator Status 4. FCC Technologies & Technical Infrastructures	Coffee Break					Coffee Break					Coffee break								
15:00-15:30		Coffee Break					Coffee Break					Coffee break								
15:30-16:00	Coffee break	Detector concepts: Calorimetry and PID	Collective Effects	Civil Engineering (ii)	IRIS EU Project		Large-scale infrastructure projects in Austria						EPOL (ii)	FCC-hh High Field Magnets (ii)	Transport and Logistics	Machine protection and availability				
16:00-16:30		M. A. Pleier (BNL)	L. Rivkin (PSI)	M. Capeans (CERN)	J. Gutleber		R. Galler (MUL)						A. Blondel (LPNHE)		B. Müller (FIML)	C. Welsch (ULIV)		A. Parker (U. Cambridge)		
16:30-17:00	1. Theory challenges in precision calculations 2. Flavour and BSM through measurements at 90 GeV and beyond 3. Detectors for FCC-ee - status and next steps		Early Career Researchers										Poster session	Detector concepts						
17:00-17:30																				
17:30-18:00		International Collaboration Board																		
18:00-18:30																				
18:30-19:00	Welcome reception	P. Chomaz (CEA)																		
							Apertiv Foyer Musikverein Vienna (from 17:45 to 18:45)													

56 public sessions, 230 oral presentations, 33 posters

Audience distribution - 34 countries represented



CODE OF THE UNIVERSE TRAVELLING PHOTOGRAPHIC EXHIBITION



- Josephsplatz 1, in front of the National Library, until 7th of June.

Public event – The Higgs Boson and our life

- FCC Week's 2025 Public Event at the Austrian National Library
- Fabiola Gianotti (CERN's DG), Ulrike Diebold (Vice President of Austrian Academy of Sciences), Verena Ringler (EU Governance Innovator) - Moderated by Florian Aigner (TU Wien)
- Full house with more than 350 guests, plus about 1000 watching the live stream of the event.



The Higgs Boson and our life

Speakers:

-  **Fabiola Gianotti**
(Director General, CERN)
-  **Ulrike Diebold**
(Vice President, Austrian Academy of Sciences)
-  **Verena Ringler**
(Diplomacy and Governance Innovator)

Moderator:

-  **Florian Aigner**
(TU Wien)

Public Event

Tuesday 20th May 19:00
Venue: Austrian National Library



! Save the date !



- r-ECFA visit to Finland (30/05/2025, Helsinki)

- Lots of questions in the corridors about French position and CEA/CNRS “update”

09:00	Welcome by the Vice-Rector of the University of Helsinki <i>Pieni juhlasali (F4050) , Main building, University of Helsinki</i>	<i>Kai Nordlund</i>	09:00 - 09:05
	HEP In Finland (20+5) <i>Pieni juhlasali (F4050) , Main building, University of Helsinki</i>	<i>Prof. Katri Huitu et al.</i>	09:05 - 09:30
	CMS Experiment (20+5) <i>Pieni juhlasali (F4050) , Main building, University of Helsinki</i>	<i>Mikko Voutilainen</i>	09:30 - 09:55
10:00	ALICE Experiment (15+5) <i>Pieni juhlasali (F4050) , Main building, University of Helsinki</i>	<i>Sami Sakari Rasanen et al.</i>	09:55 - 10:15
	Welcome by Research Council of Finland (15+5) <i>Pieni juhlasali (F4050) , Main building, University of Helsinki</i>	<i>Paula Eerola et al.</i>	10:15 - 10:35
	Coffee break <i>Pieni juhlasali (F4050) , Main building, University of Helsinki</i>		10:35 - 11:05
11:00	Accelerator Technology and Applications, FCC, CLIC (20+5) <i>Pieni juhlasali (F4050) , Main building, University of Helsinki</i>	<i>Dr Flyura Djurabekova</i>	11:05 - 11:30
	Magnets for Accelerators (15+5) <i>Pieni juhlasali (F4050) , Main building, University of Helsinki</i>	<i>Tiina Salmi et al.</i>	11:30 - 11:50
12:00	LHC Upgrades and Detector Technology and Applications (20+5) <i>Pieni juhlasali (F4050) , Main building, University of Helsinki</i>	<i>Jens Erik Brucken</i>	11:50 - 12:15
	Nuclear physics at JYFL-ACCLAB, ISOLDE and FAIR (15+5) <i>Pieni juhlasali (F4050) , Main building, University of Helsinki</i>	<i>Ari Jokinen et al.</i>	12:15 - 12:35
13:00	Lunch Break <i>Pieni juhlasali (F4050) , Main building, University of Helsinki</i>		12:35 - 13:35
	Theory (20+5) <i>Pieni juhlasali (F4050) , Main building, University of Helsinki</i>	<i>Aleksi Vuorinen</i>	13:35 - 14:00
14:00	Cosmology, astroparticle physics, neutrinos (20+5) <i>Pieni juhlasali (F4050) , Main building, University of Helsinki</i>	<i>David Weir</i>	14:00 - 14:25
	Applications to radiation safety (15+5) <i>Pieni juhlasali (F4050) , Main building, University of Helsinki</i>	<i>Teemu Siiskonen</i>	14:25 - 14:45
15:00	Application to climate science, CLOUD (15+5) <i>Pieni juhlasali (F4050) , Main building, University of Helsinki</i>	<i>Katrianne Lehtipalo</i>	14:45 - 15:05

- **Several (semi-public) meetings with PPG (see summary afterwards)**
 - a. Hot and dense QCD, Internal structure of protons and nuclei (14 May) [indico](#)
 - b. Higgs couplings (16 April) [indico](#)
 - c. EW measurements (13 May) [indico](#)
 - d. Precision QCD, QCD connections with astroparticle, hadronic, nuclear physics (28 May) [indico](#)
 - e. Double Higgs production (28 May) [indico](#)
 - f. EW and Higgs theoretical uncertainties (3 June) [indico](#)
 - g. Software and computing (4 June) [indico](#)
 - h. Flavour (6 June) [indico](#)

- **Open symposium @ Venice, 23-27 June (see later) [indico](#)**
 - a. Dedicated session “Large scale accelerator projects at CERN”, Tuesday morning
 - FCC-ee (including common infrastructure) by M. Benedikt
 - FCC-hh by F. Zimmermann
 - b. Reports by various PPG working groups

Maintaining U.S. Leadership in Particle Physics

- The scope of the program of activities needed to address the agenda of particle physics is broader and more diverse than ever, and it is beyond the resources, both human and fiscal, of any single nation.
- ➔ • The United States is a leader in particle physics today and is well positioned to continue to lead in the future. It has the workforce and material resources needed; it has a powerful system of universities, national laboratories, and industry; and the breadth of its activities in particle physics is unsurpassed.



The Report's 40-Year Vision for Elementary Particle Physics

- The United States will be hosting a previously-thought-impossible muon collider and playing a key role in the international Higgs factory.
- Our deeper understanding about the physical world will have impact across the sciences and enable new benefits for humankind.
- Connections made across the subfields of physics and other sciences will advance particle physics as well as the other fields.
- By making progress on seemingly impossible problems and with its profound discoveries, particle physics will inspire the next generations.

This slide does not break the P5 symmetry between FCC-ee and ILC (at least not directly)



Host the World's Highest Energy Elementary Particle Collider

Recommendation 1: The United States should host the world's highest-energy elementary particle collider around the middle of the century. This requires the immediate creation of a national muon collider research and development program to enable the construction of a demonstrator of the key new technologies and their integration.

- Developing a US-hosted muon collider—an unprecedented machine requiring dedicated research, development, and a technology demonstrator followed by a feasibility study—would solidify U.S. leadership in particle physics and drive accelerator innovation.
- A collider with approximately 10 times the energy of the Large Hadron Collider is crucial to address the big questions of particle physics.
- A muon collider combines the physics advantages of an electron-positron and a proton-proton collider, with a much smaller size.

However, a multi-TeV muon collider “around the middle of the century” (!) entirely removes the relevance of a TeV-scale linear e^+e^- collider (but not of a 10-100 pCM FCC-hh, similar time scale, much larger breadth)



Participate in the Future Circular Collider Higgs Factory



Recommendation 2: The United States should participate in the international Future Circular Collider Higgs factory currently under study at CERN to unravel the physics of the Higgs boson.

- Determining whether the Higgs is elementary or has substructure has huge ramifications for the future of particle physics.
- Active participation in a Higgs factory is crucial for the U.S. particle physics community.
- U.S. involvement would ensure a leading role in cutting-edge technology and provide valuable training for the next generation of physicists.

And now, the P5 symmetry is spontaneously and explicitly broken:
At 240-250 GeV, the US openly root for FCC-ee.



- These two recommendations tremendously clarify the landscape prior to the Venice Symposium
- The US commitment to a multi-TeV muon collider “around the middle of the century” just renders a TeV-scale linear collider in Europe (or in Japan, for that matters) irrelevant
- The explicit commitment to a participation to FCC-ee (confirming the White House Statement of Intent in April 2024) overrides the P5 report, which had not managed to break the symmetry between FCC-ee and ILC.
- The ESPPU secretary was urged to add a presentation of the NAS conclusions during the Venice symposium in addition to (or instead of?) Hitoshi’s scheduled presentation of the much older and now overridden P5 report.
- NB. The NAS report goes to DoE, NSF and **Congress** (which P5 reports does not)

Indico agenda:

<https://indico.cern.ch/event/1546804/>

C. Anastopoulos¹, R. Assmann¹⁶, A. Ball², O. Bruning³, O. Buchmueller⁴, T. Camporesi^{5,15}, P. Collier³, J. Dainton^{6,14}, G. Davies⁴, J.R. Ellis^{3,7}, B. Goddard³, L. Gouskos⁸, G. Hall⁴, M. Klute⁹, M. Koratzinos¹⁰, G. Landsberg⁸, K. Long⁴, L. Malgeri³, F. Maltoni^{11,17}, F. Moortgat³, C. Mariotti¹², S. Myers³, J.A. Osborne³, M. Pierini³, D.R. Tovey¹, D. Treille³, T.S. Virdee⁴, N. Wardle⁴, M. Zanetti¹³

Contact person: T. Virdee (t.virdee@imperial.ac.uk)

Imperial College London



Summary

We support (FCC-ee + FCC-hh) as the preferred option for CERN's future

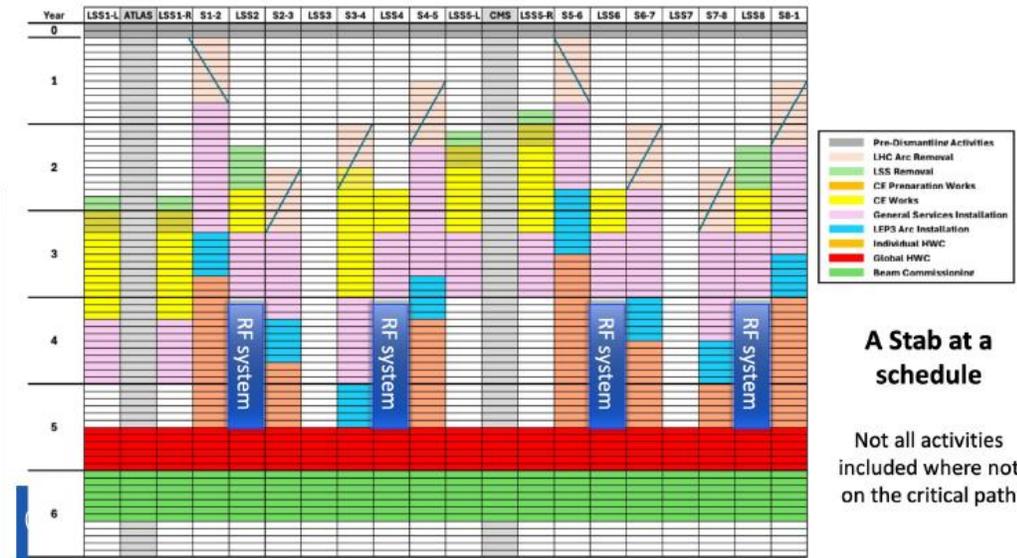
ESPP requests an alternative/ backup option for the preferred one.

An e^+e^- collider in the LHC tunnel, referred to here as LEP3, is proposed as an a backup option

- Compared to the linear e^+e^- colliders proposed, LEP3 provides similar luminosity for ZH production, higher luminosity at lower energies and options for multiple experiments, all at much lower cost. *(Note: no top thresh., m_w to 1 MeV, five times less integrated lumi at the Z pole)*
- LEP3 is a reasonable (perhaps the best) backup option
- Leaves room (time, budget, resources) for further development of THE machine that can probe directly the energy frontier at a constituent $\sqrt{s} \sim 10$ times LHC. *(Note: with the muon collider in the US, this leaves FCC-hh as the only option, whose cost after LEP3 is about the same as FCC-ee+hh.)*

No showstoppers have yet been identified, and we consider this proposal to be sufficiently interesting to deserve further study. We have identified important areas that would require deeper investigation before CERN could commit to LEP3.

2 IPs (ATLAS, CMS)



Estimated cost

Cost Element	2 new Xpts	2 Exist Xpts
Accelerator	2705	2705
Injectors and Transfer Lines	295	295
Technical Infrastructures	435	435
Experiments	130	60
Civil Engineering	165	165
LHC Removal/LEP3 Installation	140	140
Total CERN (MCHF)	3870	3800
Experiments non-CERN User	900	270
Community Contribution (MCHF)		

2026 UPDATE

OPEN SYMPOSIUM European Strategy for Particle Physics



23-27 JUNE 2025



Open Symposium on the European Strategy for Particle Physics

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

19:15

9:00 - 10:45 Opening Session

Parallel Sessions I - IV

11:15 - 13:00 Parallel I - IV, part I

Lunch Break: 13:00 - 14:00

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

16:45 - 19:15 Accelerator Tech.

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

Monday

09:00	Official Opening	
	<i>Sala Perla, Palazzo del Casinò</i>	09:00 - 09:35
	Implementation of the 2020 update of the European Strategy	<i>Fabiola Gianotti (CERN)</i>
	<i>Sala Perla, Palazzo del Casinò</i>	09:35 - 10:10
10:00	Outstanding questions in particle physics	<i>Eric Laenen (Nikhef)</i>
	<i>Sala Perla, Palazzo del Casinò</i>	10:10 - 10:45
	Coffee-Break	

Parallel 1 - Electroweak Physics Jorge de Blas (University of Granada), Monica Dunford (Heidelberg University)	Parallel 2 - Accelerator Technologies Anke-Susanne Mueller (KIT), Roberto Losito (CERN)	Parallel 3 - Neutrinos and Cosmic Messengers Pilar Hernandez (University of Valencia), Sara Bolognesi (CEA Saclay)	Parallel 4 - Strong Interactions Andrea Dainese (INFN-Padua), Cristinel Diaconu (CCPM Marseille)	Parallel 5 - Flavour Gino Isidori (University of Zurich), Marie-Helene Schune (JCLab Paris)
<i>Palazzo del Casinò, sala Perla</i>	<i>Palazzo del Casinò, sala Mosaici 2</i>	<i>Palazzo del Casinò, Sala Volpi</i>	<i>Palazzo del Casinò, Sala Mosaici 1</i>	<i>Palazzo del Casinò, Sala Amici</i>
11:15 - 13:00	11:15 - 13:00	11:15 - 13:00	11:15 - 13:00	11:15 - 13:00
Lunch Break				

14:00	Parallel 1 - Electroweak Physics (part II) Jorge de Blas (University of Granada), Monica Dunford (Heidelberg University)	Parallel 2 - Accelerator Technologies (part II) Anke-Susanne Mueller (KIT), Roberto Losito (CERN)	Parallel 3 - Neutrinos and Cosmic Messengers (part II) Pilar Hernandez (University of Valencia), Sara Bolognesi (CEA Saclay)	Parallel 4 - Strong Interactions (part II) Andrea Dainese (INFN-Padua), Cristinel Diaconu (CCPM Marseille)	Parallel 5 - Flavour (part II) Gino Isidori (University of Zurich), Marie-Helene Schune (JCLab Paris)
	<i>Palazzo del Casinò, Sala Perla</i>	<i>Palazzo del Casinò, Sala Mosaici 2</i>	<i>Palazzo del Casinò, Sala Volpi</i>	<i>Palazzo del Casinò, Sala Mosaici 1</i>	<i>Palazzo del Casinò, Sala Amici</i>
	14:00 - 15:30	14:00 - 15:30	14:00 - 15:30	14:00 - 15:30	14:00 - 15:30
Short Break to allow for change rooms					
<i>Palazzo del Casinò, Venice Lido</i>					
15:30 - 15:40					
16:00	Parallel 6 - Detector Technologies Thomas Bergauer (HEPHY Vienna), Ulrich Husemann - KIT Karlsruhe	Parallel 7 - BSM Fabio Maltoni (Louvain, Bologna), Rebeca Gonzalez Suarez (Uppsala University)	Parallel 8 - Dark matter/Dark Sector Emanuele Castorina (University of Milano) - Chairperson, Jocelyn Monroe (University of Oxford), Matthew McCullough (CERN)	Parallel 9 - Computing Borut Kersevan (JSI - Ljubljana University), Tommaso Boccali (INFN-Pisa)	
	<i>Palazzo del Casinò, Sala Perla</i>	<i>Palazzo del Casinò, Sala Mosaici 2</i>	<i>Palazzo del Casinò, Sala Volpi</i>	<i>Palazzo del Casinò, Sala Mosaici 1</i>	
	15:40 - 17:00	15:40 - 17:00	15:40 - 17:00	15:40 - 17:00	
17:00	Coffee-Break				
	<i>Palazzo del Casinò, Sala degli Specchi</i>				
17:00 - 17:20					
18:00	Parallel 6 - Detector Technologies (part II) Thomas Bergauer (HEPHY Vienna), Ulrich Husemann - KIT Karlsruhe	Parallel 7 - BSM (part II) Fabio Maltoni (Louvain, Bologna), Rebeca Gonzalez Suarez (Uppsala University)	Parallel 8 - Dark matter/Dark Sector (part II) Emanuele Castorina (University of Milano) - Chairperson, Jocelyn Monroe (University of Oxford), Matthew McCullough (CERN)	Parallel 9 - Computing (part II) Borut Kersevan (JSI - Ljubljana University), Tommaso Boccali (INFN-Pisa)	
	<i>Palazzo del Casinò, Sala Perla</i>	<i>Palazzo del Casinò, Sala Mosaici 2</i>	<i>Palazzo del Casinò, Sala Volpi</i>	<i>Palazzo del Casinò, Sala Mosaici 1</i>	
	17:20 - 19:15	17:20 - 19:15	17:20 - 19:15	17:20 - 19:15	
19:00					

Tuesday

09:00	FCC-ee (incl. common infrastructure) <i>Sala Perla, Palazzo del Casinò</i>	<i>Michael Benedikt (CERN)</i> 09:00 - 09:40
10:00	FCC-hh <i>Sala Perla, Palazzo del Casinò</i>	<i>Frank Zimmermann (CERN)</i> 09:40 - 10:10
	A Linear Collider at CERN <i>Sala Perla, Palazzo del Casinò</i>	<i>Steinar Stapnes (CERN)</i> 10:10 - 10:50
11:00	Coffee-Break <i>Sala degli Specchi, Palazzo del Casinò</i>	10:50 - 11:20
	LEP3 <i>Sala Perla, Palazzo del Casinò</i>	<i>Tejinder Virdee (Imperial College London)</i> 11:20 - 11:45
12:00	LHeC <i>Sala Perla, Palazzo del Casinò</i>	<i>Jorgen D'Hondt (Nikhef)</i> 11:45 - 12:10
	Muon Collider <i>Sala Perla, Palazzo del Casinò</i>	<i>Daniel Schulte (CERN)</i> 12:10 - 12:35
	Linear Collider Vision: future perspectives with advanced technologies <i>Sala Perla, Palazzo del Casinò</i>	<i>Jenny List DESY</i> 12:35 - 13:00
13:00	Lunch Break	

15:00	Status and plans for the realisation of the Circular Electron Positron Collider (CEPC) and other large-scale projects in China <i>Yifang Wang (IHEP Beijing)</i>	15:05 - 16:40
	Status and plans for the realisation of the International Linear Collider (ILC) and other large-scale projects in Japan <i>Shoji Asai (KEK)</i>	16:05 - 16:40
16:00	Large-scale particle physics projects in the US and plans for participation in projects outside <i>Hitoshi Murayama (Berkeley)</i>	16:40 - 16:15
	Coffee-Break <i>Palazzo del Casinò, Sala degli Specchi</i>	16:15 - 16:45
17:00	Conceptual challenges of collider proposals <i>Palazzo del Casinò, Sala Perla</i>	<i>Gianluigi Arduini (CERN)</i> 16:45 - 17:25
	The technology challenges <i>Palazzo del Casinò, Sala Perla</i>	<i>Philip Burrows (Oxford University)</i> 17:25 - 18:05
18:00	Challenges for high intensity accelerators <i>Palazzo del Casinò, Sala Perla</i>	<i>Chris Rogers (STFC, UK)</i> 18:05 - 18:30
19:00	Discussion <i>Palazzo del Casinò, Sala Perla</i>	<i>Tor Raubenheimer (SLAC) - discussion leader</i> 18:30 - 19:15
	Communicating the case for CERN's next flagship collider <i>Palazzo del Casinò, Venice Lido</i>	19:15 - 20:00

Wednesday

09:00	Electroweak Physics <i>Florenca Canelli (University of Zurich)</i>
10:00	<i>Sala Perla, Palazzo del Casinò</i> 09:00 - 10:45
11:00	Coffee-Break <i>Palazzo del Casinò, Sala degli Specchi</i> 10:45 - 11:15
12:00	Strong Interactions <i>Sven-Olaf Moch (Hamburg University)</i>
13:00	<i>Sala Perla, Palazzo del Casinò</i> 11:15 - 13:00
14:00	Lunch Break <i>Palazzo del Casinò, Sala degli Specchi</i> 13:00 - 14:30
15:00	Flavour physics <i>Tim Gershon (University of Warwick)</i>
16:00	<i>Sala Perla, Palazzo del Casinò</i> 14:30 - 16:15
17:00	Coffee-Break <i>Palazzo del Casinò, Sala degli Specchi</i> 16:15 - 16:45
18:00	Neutrinos and Cosmic Messengers <i>Mauro Mezzetto (INFN-Padua)</i>
	<i>Palazzo del Casinò, Venice Lido</i> 16:45 - 18:30

Thursday

09:00	BSM physics <i>Maurizio Pierini (CERN)</i>
10:00	<i>Sala Perla, Palazzo del Casinò</i> 09:00 - 10:45
11:00	Coffee-Break <i>Palazzo del Casinò, Sala degli Specchi</i> 10:45 - 11:15
12:00	Dark Matter / dark sector <i>Caterina Doglioni (University of Manchester)</i>
13:00	<i>Palazzo del Casinò, Venice Lido</i> 11:15 - 13:00
14:00	Lunch Break <i>Palazzo del Casinò, Sala degli Specchi</i> 13:00 - 14:30
15:00	Detector Technologies <i>Daniela Bortoletto (University of Oxford)</i>
16:00	<i>Sala Perla, Palazzo del Casinò</i> 14:30 - 16:15
17:00	Coffee-Break <i>Palazzo del Casinò, Sala degli Specchi</i> 16:15 - 16:45
18:00	Computing <i>Stephane Jezequel (LAPP Anecy)</i>
	<i>Sala Perla, Palazzo del Casinò</i> 16:45 - 18:30

Friday

09:00	National Inputs <i>Sala Perla, Palazzo del Casinò</i>	<i>Calin Alexa (Bukarest)</i> 09:00 - 09:30
	Role of national labs, strategy implementation <i>Sala Perla, Palazzo del Casinò</i>	<i>Achille Stocchi (IJCLab)</i> 09:30 - 09:55
10:00	Relations with other fields of physics <i>Sala Perla, Palazzo del Casinò</i>	<i>Marek Karliner (Tel Aviv)</i> 09:55 - 10:20
	Communication, outreach, career aspects <i>Sala Perla, Palazzo del Casinò</i>	<i>Pierre Van Mechelen (Universiteit Antwerpen)</i> 10:20 - 10:45
11:00	ECR perspectives <i>Sala Perla, Palazzo del Casinò</i>	<i>Christina Dimitriadi (KTH) et al.</i> 10:45 - 11:15
	Coffee-Break <i>Palazzo del Casinò, Venice Lido</i>	11:15 - 11:45
12:00	Sustainability <i>Sala Perla, Palazzo del Casinò</i>	<i>Tadeusz Lesiak (Krakow)</i> 11:45 - 12:10
	Knowledge and technology transfer <i>Sala Perla, Palazzo del Casinò</i>	<i>Richard Brenner (Uppsala University)</i> 12:10 - 12:35
13:00	Project comparison (first attempt) <i>Sala Perla, Palazzo del Casinò</i>	<i>Gianluigi Arduini (CERN)</i> 12:35 - 13:05
	Key messages from the symposium <i>Palazzo del Casinò, Venice Lido</i>	<i>Karl Jakobs (Universitaet Freiburg)</i> 13:05 - 13:40

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

Country	FCC (any)	FCC-ee	FCC-ee then hh	FCC-hh.direct	Mu-coll	LC@CERN	LEP3	None	Comments
ALL	32	4	25	2	0	1	0	3	
Austria	1		1						FCC not clearly named (but they want QCD and Flavour in the e+e- coll)
<i>Brazil</i>	1								LCF smaller cost, higher energy
Belgium	1		1						
Bulgaria									Did not submit a national input (Member state)
<i>Canada</i>								1	No recommendation in their contribution
<i>Croatia</i>	1								
<i>Cyprus</i>									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	1	1							
Greece	1		1						
Hungary	1	1							
<i>India</i>									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)
<i>Japan</i>						1		1	Highest priority is ILC in Japan (not in the question). They do not expli
<i>Latvia</i>									Did not submit a national input (Associate member state)
<i>Lithuania</i>	1		1						No firm recommendation, circular e+e- collider could be the preparator
Netherland								1	Main document: no preference, wait for ESG. ECR: Divided votes, CL
Norway	1		1						
<i>Pakistan</i>	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						
<i>Slovenia</i>	1		1						
Spain	1		1						
Sweden	1		1						
Switzerland	1		1						
<i>Türkiye</i>									Did not submit a national input (Associate member state)
<i>Ukraine</i>	1		1						
United Kingdom	1		1	1					Only FCC tunnel recommended. Large contingents for FCC int and fo
<i>United States</i>	1		1						LC Vision with 4xL needs technical review. US has another contributi

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 $> 500\text{GeV}$, 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.

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

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.*

Switzerland, update in May 2025: Specified that "FCC" always mean "FCC-ee followed by FCC-hh". No change in the google sheets, except added "FCC anyway" in the column "Preferred option not feasible"

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 $\sqrt{s} = 500$ GeV, allowing a clean observation of the e⁺e⁻ → $\nu\bar{\nu}H$ process, of the top threshold, and a first determination of the Higgs-boson self coupling.
- Energies of $\sqrt{s} = 1\text{--}3$ 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 $\sqrt{s} = 240$ GeV.

If the construction of an e⁺e⁻ collider comparable to the FCC_{ee} 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 $t\bar{t}$ 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@ $\sqrt{s}=85$ 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.

**CEA and CNRS contribution
to the 2026 update of the European strategy for particle physics**

François Jacq (Administrateur Général du CEA, [François.Jacq@cea.fr](mailto:Francois.Jacq@cea.fr))
Antoine Petit (Président-Directeur Général du CNRS, Antoine.Petit@cnrs.fr)

- The immediate priority for CERN remains the HL-LHC program, whose scientific exploitation must be maximized once the experimental facility is operational
- The French particle physics community confirms the scientific interest of the FCC project, with its two phases — FCC-ee and FCC-hh — with FCC-ee offering a unique opportunity for high-precision electroweak and Higgs physics, while paving the way to the energy frontier. CERN is perfectly positioned to lead this ambitious project.
- The current R&D efforts on accelerator components, in particular on accelerating RF systems and on high-field superconducting magnet technology (underlined as a top priority in the previous ESPP session), must be reinforced, as they will benefit both the next flagship program and a wider range of scientific and technological fields. These developments should help to reduce CERN technologies environmental impact.
- Given the major uncertainties underlying the feasibility of the FCC project (environmental issues, financial sustainability in a particularly complex financial context, ...), it is important to consider alternative scenarios to the FCC, so that CERN can be guaranteed to present a scientific program at the best level, if it were not ultimately decided by the CERN Council to launch the FCC project. The discussion on those alternative options, based at CERN, even if they present a reduced scientific potential and attractiveness, should be triggered and coordinated by CERN, with the active participation of the European scientific community, including of course representative from the French community.

What should be our answer when questioned on the last paragraph of the CEA/CNRS contribution ?

French Eol's

Eol-1) SEED : Eol Nationale
portée par A. Besson contenant tous les groupes français intéressés par du MCMOS et du VD.

Eol-2) "Towards Time of flight MCMOS tracking layers for a detector at FCC-ee" (Eol nationale) Irfu et Lyon:
portée par Ph. Schwemling, G. Boudoul responsable IN2P3

Eol-3) ALLEGRO calo: (Eol internationale)
Responsable IN2P3: N. Morange

Eol-4) "calo haute granularité version FCC, SiW" (Eol internationale) V. Boudry responsable FCC-IN2P3 (portée par V. Boudry)

Eol-7) GRAINITA (orsay-clermont)
(Eol Nationale) portée par S Monteil

Eol-6) dual readout crystal (Eol internationale)
S. Gascon ? est ce approuvé par l'IP2I ?

EoI-7) EoI SDHCAL (Lyon)
(EoI internationale) portée par I. Laktineh

EoI-8) Development of an ultra-light drift chamber with PID capabilities for the IDEA detector Gabriel Charles

4 concepts (DC):

DC-A) ALLEGRO
contact: N. Morange + G. Marchiori + GB
(l'objectif étant ici aussi d'explorer rapidement dans la communauté qui d'autre serait intéressé à signer/contribuer à ce DC)

DC-B) ILD-CC
contact;: V. Boudry + GB (")

DC-C) CLD
contact: J. Andrea + GB (")

DC-D) IDEA
contact: S. Gascon + GB (")

Current Status of FCC in the Grey book

Institute Name	Institute Parent Name	Town	Country	Team Leader & Deputy Team Leader(s)
Institut Pluridisciplinaire Hubert Curien	Centre National de la Recherche Scientifique	Strasbourg	France	(TL) EL BITAR, ZIAD (DTL) GOFFE, MATHIEU
Laboratoire APC - Astroparticules et Cosmologie	Centre National de la Recherche Scientifique	Paris	France	(TL) BERNARDI, GREGORIO (DTL) MARCHIORI, GIOVANNI
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 Leprince-Ringuet	Centre National de la Recherche Scientifique	Palaiseau	France	(TL) BOUDRY, VINCENT
Department of Physics	University of Tehran	Tehran	Iran	(TL) AZIZI, KAZEM
Sezione di Napoli (INFN)	University Federico II and INFN, Naples	Naples	Italy	(TL) PAOLUCCI, PIERLUIGI (DTL) IORIO, ALBERTO ORSO MARIA
Universita e INFN, Ferrara		Ferrara	Italy	(TL) CIBINETTO, GIANLUIGI
Laboratori Nazionali di Frascati	INFN e Laboratori Nazionali di Frascati	Frascati	Italy	(TL) BOSCOLO, MANUELA
Sezione di Roma III	Universita e INFN Roma Tre	Rome	Italy	(TL) DI MICCO, BIAGIO (DTL) IODICE, MAURO
Sezione di Bologna INFN	Universita e INFN, Bologna	Bologna	Italy	(TL) GIACOMELLI, PAOLO
Universita & INFN Pisa		Pisa	Italy	(TL) PALLA, FABRIZIO (DTL) BEDESCHI, FRANCO
Sezione di Padova	Universita e INFN, Padova	Padua	Italy	(TL) AZZI, PATRIZIA
Universita degli Studi di Udine		Udine	Italy	(TL) PANIZZO, GIANCARLO
Sezione di Torino	Universita e INFN Torino	Turin	Italy	(TL) DA ROCHA ROLO, MANUEL DIONISIO
Sezione di Pavia	Pavia University and INFN	Pavia	Italy	(TL) BRAGHIERI, ALESSANDRO (DTL) GAUDIO, GABRIELLA
Universita e INFN, Perugia		Perugia	Italy	

Jamboree FCC / Future Colliders



📅 vendredi 4 juil. 2025, 09:00 → 17:40 Europe/Paris

Description <https://cern.zoom.us/j/67132791487?pwd=qJaDMKBBTfS7ix9PVukZsqnLo8T2DC.1>

- | | | | | |
|--------------|---------|--|-------|---|
| 09:00 | → 09:20 | Introduction/News | 🕒 20m | ✎ |
| 09:20 | → 09:40 | ZH cross section and Higgs Mass measurements in ZH events at 240 and 365 GeV @ APC
Orateurs: Gregorio Bernardi (APC Paris CNRS/IN2P3), Tom Fournier (APC Paris CNRS/IN2P3) | 🕒 20m | ✎ |
| 09:40 | → 10:00 | Higgs couplings measurements at 240 and 365 GeV @APC
Orateurs: Alexis Maloizel (APC, Paris), Giovanni Marchiori (APC Paris) | 🕒 20m | ✎ |
| 10:00 | → 10:20 | Open | 🕒 20m | ✎ |
| 10:20 | → 10:40 | ALLEGRO ECAL
Orateur: Zhibo Wu | 🕒 20m | ✎ |
| 11:00 | → 11:20 | ALLEGRO @ CPPM | 🕒 20m | ✎ |
| 11:20 | → 11:40 | Development of the full simulation of the tracker concepts for the Future Circular Collider project
Orateur: Gaelle Boudoul (IP2I/AICP (CNRS/IN2P3)) | 🕒 20m | ✎ |
| 11:40 | → 12:00 | open | 🕒 20m | ✎ |
| 12:00 | → 12:20 | H(ZZ*) measurements in 4l channels at FCCee | 🕒 20m | ✎ |
| 12:20 | → 12:40 | Open | 🕒 20m | ✎ |
| 12:40 | → 13:00 | APRIL : a particle flow algorithm for future colliders
Orateurs: Gerald GRENIER (IPN Lyon/Université Lyon 1), Tanguy PASQUIER (IP2I, Univ Lyon 1) | 🕒 20m | ✎ |

Bilan des ressources RH 2025 → cohérence avec NSIP

APC
CPPM
IJC Lab
IPHC
IP2I
LAPP
LLR
LPC
LPNHE
LPSC
L2IT

Ressources Humaines (recap 2024, mettre à jour SVP)

APC

- Gregorio Bernardi : DR (0.7* ETP).
- Marco Bomben : MCF (0.1 ETP).
- Giovanni Marchiori: DR (0.4* ETP).
- Alexis Maloizel : PhD (0.5 ETP).
- Tong Li : post-doc mixte ATLAS-FCC
(0.5 ETP) **FIN 12/2024**
- **TOTAL : 2.2 FTE**

LPNHE

- 3 permanents :
 - **Luc Poggioli** (Em, ATLAS/FCC, 80%), **Alain Blondel** (Em, FCC/T2K, 40%), **Bogdan Malaescu** (CR, ATLAS/FCC/g-2, 30%)
- 1 doctorant :
 - **Line Delagrang**e 2/3 ATLAS, 1/3 FCC
 - soutenance en 2025 (Mesure de α_s dans ATLAS & études d'optimisation QCD au FCC)
- 1 postdoc :
 - **Lata Panwar** (postdoc ANR-LEAP 07/2022-07/2025) 2/3 ATLAS, 1/3 FCC
 - Etude du Lund Jet Plane dans ATLAS. Utilisation dans FCC-ee et optimisation des paramètres des détecteurs

TOTAL : 2.5 FTE

RH : IJCLAB

Nom	Activité	ETP 2024	ETP 2025
Nicolas Morange	Allegro ; Physique	0.30	0.30
Daniel Fournier	Allegro	0.10	0.10
Ronic Chiche (IT)	Allegro	0.10	0.10
Laurent Serin	DRD	0.10	0.10
Marie-Hélène Schune	Grainita	0.15	0.15
Jacques Lefrançois	Grainita	0.35	0.35
Giulia Hull (IT)	Grainita	0.40	0.40
Ianina Boyarintseva	Grainita	0.30	0.30
Yasmine Amhis	Physique	0.10	0.10
Zuchen Huang (CDD, 01/12/2024)	Allegro	0.05	0.50
Sergey Barsuk	Grainita	0.05	0.05
Dominique Breton (IT)	Grainita	0.05	0.05
Jihane Maalmi (IT)	Grainita	0.05	0.05
Carlos Dominguez-Goncalves (IT)	Grainita	0.25	0.25

TOTAL : 2.35 FTE

2.80 FTE

Statut	Nom	FCC-PED	GRAM	AIDAINNOVA / T-CALO	T-MRPC	Total Futurs Collision.
Permanent	G. Boudoul	40%, 55%	1%, 5%			40%, 60%
	D. Contardo	20%, 20%	15%, 15%			35%, 35%
	S. Gascon	25%, 25%				25%, 25%
	M. Gouzevitch	5%, 5%				15%, 0%
	G. Grenier	10%, 10%		30%, 30%	5%, 5%	45%, 45%
	I. Laktineh	10%, 10%		15%, 15%	15%, 15%	35%, 35%
	L. Mirabito	10%, 10%		5%, 5%	15%, 15%	25%, 25%
	G. Cacciapaglia	25%, 0%				25%, 0%
	A. Deandrea	20%, 20%				20%, 20%
	L. Darmé	10%, 10%				10%, 10%
	N. Mahmoudi	15%, 15%				15%, 15%
	F. Nortier	0%, 40%				0%, 40%
Postdoc/ CDD	J. Xiao	10%, 10%				10%, 10%
	NN ('mixte')	5%, 30%				5%, 30%
Doctorant	E. Jourd'huy (D3)	10%, 0%				10%, 0%
	T. Pasquier (D2)	10%, 10%		65%, 0%	10%, 75%	85%, 85%
	W. Vaginay (D1)	20%, 85%				20%, 85%
	C. Verollet (D1)	5%, 30%				5%, 30%
	Total Project (FTE)	2.40, 3.80	0.15, 0.20	1.10, 0.45	0.40, 1,05	4.20, 5.45

RH : IPHC

- Jeremy Andrea : DR (0.2 ETP).
- Auguste Besson : MCF (0.1 ETP).
- Ziad El Bitar: DR (0.2 ETP).
- Emmanuel Medernach : IR (0.5 ETP).
- Meena Meena : post-doc mixte CMS-FCC (démarrage activité ~full time FCC en juillet 2024).
- Gaëlle Sadowski: PhD (1 ETP).
- +1 Eric Chabert (0.2 ETP) starting in fall 2024

TOTAL : 3.0 FTE

RH : CPPM

Nom	Statut	FTE 2024	FTE 2025
Marlon Barbero	Enseignant-Chercheur	0.10	0.10
Farès Djama	Ingénieur-Chercheur	0.35	0.35
Lorenzo Feligioni	Chercheur	0.10	0.00
Emmanuel Monnier	Chercheur	0.05	0.05
Pierre Karst	Ingénieur	0.20	0.20

TOTAL : 0.8 FTE

0.7 FTE

RH:

LAPP

- Marco Delmastro (DR2, Coordinateur LAPP FCC-PED)
 - ✓ 10% en 2024, même en 2025
- Olivier Arnez (CPJ USMB)
 - ✓ 5% en 2024, même en 2025
- Zhibo Wu (postdoc IN2P3 2024-2026)
 - ✓ 50% FCC en 2024 (50% ATLAS), même en 2025
- Hind Taibi (stagiaire M1)
 - ✓ 30% en 2024 (100% mai-aout 2024)
- Stage M1 à pourvoir en 2025
 - ✓ ~4 mois, physique Higgs FCC-ee pour FS et rapport ECFA

TOTAL : 1.2 FTE

Évolution 2025: LPSC

- Contributions simulation + analyses à discuter avec le recrutement CPJ
(JBdV , CPJ ~ 2×10% + en principe augmentation progressive, FM ~ 5% ?)

- Intérêts contributions techniques :

→ Service mécanique (SERM): participation DRD6 (et 7, 8)

Structures mécaniques (D. Grondin)

« Thermal integration » (J. Giraud)

« micro-cooling » (P. Delebecque)

→ Service électronique: plus générique que FCC

WADPAT (F. Rarbi, FM)

TOTAL : 0.4 FTE (tbc)

RH:

LPC

LLR

Statut	LPC
Permanent	Hervé Chanal (MCF) Romain Madar (CR) Stéphane Monteil (Prof) Magali Magne (IE) David Picard (IE)
Postdoc/CDD	Yingrui Hou (CNRS) Mike Yeresko (ATER)
Doctorant	Tristan Miralles (MESRI) Lars Roehrig (DFG)

LLR	2024 / 2025
R. Salerno (DR)	10 % / 5 %
V. Boudry (CR)	40 % / 40 %
C. Charlot (DR)	10 % / 10 %
U. Bassler (DR)	15 % / 50 %
J.C. Brient (em)	15 % / 15 %
H. Videau (em)	10 % / 10 %
ANR T-Calo	5 % / 30 %
ANR Calo5D	5 % / 30 %

TOTAL : 1.1 / 1.8 FTE

Demande de ressources RH pour 2026.

Rappel demandes 2024

- 1) Postdoc mixte IJCLab ATLAS-FCC-Allegro
- 2) Postdoc mixte IP2I CMS-FCC-Tracking
- 3) Postdoc mixte APC ATLAS-FCC

DEMANDE RESSOURCES HUMAINES IN2P3 EN 2025

Laboratoire	Permanents	Postdocs	Doctorants
APC	CR : ATLAS/FCC (Higgs/ALLEGRO)		PhD: ATLAS/FCC (Higgs/Allegro)
LPCA		PD: LHCb / FCC	
CPPM		PD: ATLAS / FCC	PhD: ALLEGRO (technique)
IJCLab			
IP2I			
....			

Faire figurer les demandes qui sont dans les priorités du labo (DIALOG), éventuellement inter-classer entre labos. Les autres demandes (non-remontées par le labo) peuvent être affichées en gris. Préciser en 2/3 mots le sujet.

Doctorant : préciser bourse entière ou demi-bourse (avec qui ?)

• Classement: **CR / APC**

PD / LPCA

PhD / CPPM

APC
CPPM
IJCLab
IPHC
IP2I
LAPP
LLR
LPC
LPNHE
LPSC
L2IT

Prévisions évolution / Demandes de ressources RH pour 2026.

APC
CPPM
IJC Lab
IPHC
IP2I
LAPP
LLR
LPC
LPNHE
LPSC
L2IT

One, maybe 2 new Ph.D. students starting: Tom Fournier + Bourse CNRS

Postdoc ATLAS/FCC

Budget 2025, demande budget pour 2026.

Budget provient maintenant aussi des MP sous-detecteurs

	CERN (3nights) Phys wkshop	Austria FCC-week	FCC-France	FCC-meet CERN	open symposium	TOTAL (k€) TOT	Reçu	TOTAL rounded
COUT VOYAGE	800	1800	500	400	1500			
APC+FCC-FR	3200	5400	2000	3200	3000	21,8	10	22
CPPM	800	0	1000	400	1500	3,7	3	4
IJC Lab	2400	3600	1500	400	1500	9,4	3	9
IPHC	1600	3600	1000	4000	1500	11,7	6	12
IP2I	5600	9000	6000	1000	1500	23,1	6	23
LAPP	400	3600	1000	400	1500	6,9	6	7
LLR	1600	1800	1500	400	1500	6,8	7	7
LPC	2400	1800	1000	1600	1500	8,3	3	8
LPNHE	2400	1800	1500	1200	1500	8,4	3	8
LPSC	800	1800	2000	1600	1500	7,7	3	8
L2IT	300	0	1500	0	0	1,8		2
TOTAL-2024	21500	32400	20000	14200	16500	109,6	50	110

En 2026

- FCC Physics workshop @ Munich ($200E+5*200E=1200E+300$ inscription=1500E)
- FCC week @ Helsinki ($250E+5*250E=1500E+500$ inscription=2000E)
- FCC France ou France-Italie en France (500E)

Organisation prochain Fcc France (Novembre).

Salles réservée à l'APC pour 70-80 personnes

- Mercredi 12/11 14-17.30 + reception
- Jeudi 13/11 10-12.30 et 14-17-30 + diner
- Vendredi 14/11 9.00-12.30

Comité d'organisation ?

Thème communication

**2026 est une année Fcc France-Italie, qui se tiendrait en France.
Que faire ?**