



# 7th FCC Physics Workshop

## Monday 29 January 2024

### Plenary: General FCC meeting - Auditorium (13:30 - 15:30)

-Conveners: Laurent Vacavant

time	[id] title	presenter
13:30	[66] Welcome address	
13:35	[67] Practical information	
13:40	[5] Introduction and goals of the workshop	GROJEAN, Christophe
14:00	[81] FCC Feasibility Study status	ZIMMERMANN, Frank BENEDIKT, Michael
14:20	[2] Towards more luminosity	ZIMMERMANN, Frank
14:45	[3] Progress of civil engineering studies for FCC	WATSON, Timothy Paul
15:10	[4] Local communication and environmental studies	GUTLEBER, Johannes

### Plenary: The Physics, Experiments & Detectors (PED) feasibility study - Auditorium (16:00 - 17:30)

-Conveners: Roberto Tenchini

time	[id] title	presenter
16:00	[6] Progress and goals in various EPOL topics	WILKINSON, Guy
16:18	[7] Software status and goals	FRANCOIS, Brieuc
16:36	[8] Detector concepts status	PLEIER, Marc-Andre
16:54	[9] Progress and prospects on the MDI study	BOSCOLO, Manuela
17:12	[10] Detector requirements and case studies	AZZI, Patrizia

### Plenary: International Forum of National Contacts - Auditorium (17:30 - 19:15)

-Conveners: Gregorio Bernardi

time	[id] title	presenter
17:30	[140] Introduction + Reports on FCC-PED activities of Spain-Portugal-France	BERNARDI, Gregorio
17:42	[141] Report from UK	WILKINSON, Guy
17:50	[142] Report from Belgium and Netherland [remote]	WAALEWIJN, Wouter
17:55	[143] Report from Italy	GIACOMELLI, Paolo
18:03	[144] Report from Switzerland, Slovenia, Croatia, Austria	WEBER, Michele
18:10	[145] Report from Germany [remote]	SIMON, Frank
18:18	[146] Report from Sweden, Norway, Danmark,Finland, Baltic countries [remote]	GONZALEZ SUAREZ, Rebeca
18:25	[147] Report from Poland, Hungary, Slovakia, Czechia	LESIAK, Tadeusz
18:33	[148] Report from Romania, Bulgaria, Serbia, Greece, Cyprus, Turkey, Israel	ALEXA, Calin
18:40	[149] Report from Korea (Japan) [remote]	YOO, Hwi Dong

18:48	[150] Report from Brazil (Argentina, Chile)	REBELLO TELES, Patricia
18:55	[151] Report from US (Canada)	ENO, Sarah
19:05	[152] General Comments, Open questions	

# Tuesday 30 January 2024

## Plenary: Precision challenges: the Z lineshape - Auditorium (14:00 - 15:30)

-Conveners: Juan Alcaraz Maestre

time	[id] title	presenter
14:00	[11] Precision EW theory at the Z pole	USOVITSCH, Johann
14:23	[12] CEPC: overall status and prospects for beam polarization	DUAN, Zhe
14:46	[14] Z $\rightarrow$ Hadrons [ pile-up; subtraction of gammagamma background; hadronisation modelling; etc ]	EYSERMANS, Jan
15:09	[13] Inclusive Rb measurement and requirements	SELVAGGI, Michele

## Plenary: Precision challenges: Flavours - Auditorium (16:00 - 17:30)

-Conveners: Ketevi Adikle Assamagan

time	[id] title	presenter
16:00	[15] Exclusive Rb measurement and requirements	ROHRIG, Lars
16:23	[18] Simulation and Reconstruction: Status and Needs	FRANCOIS, Brieuc
16:46	[16] Flavour - Tera-Z Renormalisation Group Interplay	RENNER, Sophie Alice
17:09	[17] Flavour, Colliders, and the Z-pole: Opportunities for probing new physics at FCC-ee	STEFANEK, Ben

# Wednesday 31 January 2024

## Plenary: Precision challenges: Luminosity measurements - Auditorium (14:00 - 15:30)

-Conveners: Tadeusz Lesiak

time	[id] title	presenter
14:00	[19] Ultimate precision of theoretical prediction for diphotons and Bhabhas	PICCININI, Fulvio
14:23	[20] Control of end-cap acceptance for di-photons and di-leptons	BLONDEL, Alain
14:46	[21] First results from full simulation of the luminosity monitors	DAM, Mogens
15:09	[22] e/gamma separation for luminosity measurement with diphotons [remote]	WILSON, Graham

## Plenary: Precision challenges: FCC-hh - Auditorium (16:00 - 17:31)

-Conveners: Bogdan Malaescu

time	[id] title	presenter
16:00	[26] Testing Higgs naturalness at the FCC	SALVIONI, Ennio
16:23	[25] Complementarity FCC-hh / muon collider	MCCULLOUGH, Matthew Philip
16:46	[24] Update on Higgs self-coupling determination	TALIERCIO, Angela STAPF, Birgit
16:58	[23] FCC-hh: next steps in the physics studies [remote]	MANGANO, Michelangelo

# Thursday 1 February 2024

## Plenary: Precision challenges: Other topics - Auditorium (14:00 - 15:30)

-Conveners: tbc; Anadi Canepa

time	[id] title	presenter
14:00	[27] Proton structure and small-x QCD with collider neutrinos from the LHC to FCC-pp [remote]	ROJO, Juan
14:23	[28] Optimization of the machine performance at the Z pole : comparison of optics	LIUZZO, Simone
14:45	[29] Precision QCD at Tera-Z	MONNI, Pier Francesco
15:09	[31] Overview of Higgs and top activities	EYSERMANS, Jan

## Plenary: Precision challenges: BSM sensitivity - Auditorium (16:00 - 17:30)

-Conveners: Suzanne Gascon-Shotkin

time	[id] title	presenter
16:00	[32] Extended Higgs models: experimental status [remote]	SALERNO, Roberto
16:23	[33] Extended Higgs models: how to test them at FCC-ee?	DEANDREA, Aldo CACCIAPAGLIA, Giacomo
16:46	[34] SMEFT at Tera-Z	DU, Yong
17:09	[35] Direct BSM at Tera-Z	ALIMENA, Juliette

# Friday 2 February 2024

## Plenary: Summaries/Highlights - Auditorium (09:00 - 10:30)

-Conveners: Guido Emilio Tonelli

time	[id] title	presenter
09:00	[36] Physics Performance	SELVAGGI, Michele
09:18	[37] Software and computing	GANIS, Gerardo
09:36	[38] Detectors	SEFKOW, Felix
09:54	[39] EPOL	KEINTZEL, Jacqueline
10:12	[40] MDI	PALLA, Fabrizio

## Plenary: The way forward - Auditorium (11:00 - 12:30)

-Conveners: Sarah Eno

time	[id] title	presenter
11:00	[41] Indirect BSM @ Tera-Z	RIVA, Francesco
11:23	[42] Physics Programme: grand vision	SIMON, Frank
11:46	[43] P5 vision of the US contribution to FCC	MURAYAMA, Hitoshi
12:09	[44] Closing remarks	JANOT, Patrick