

FCC-ee Workshop
January 2019

Introduction to Detector Design parallel session

Four exciting sessions

Tuesday afternoon: Where we are...

F.Grancagnolo, MD

14:00 → 19:00 Experiments: Generalities, IDEA, CLD		503-1-001 - Council Chamber	Join	Council Chamber	
MDI + Lumi	14:00	MDI Overview Speaker: Manuela Boscolo (INFN e Laboratori Nazionali di Frascati (IT))	30m	503-1-001 - Council Chamber	
	14:30	Luminosity Measurement Speaker: Mogens Dam (University of Copenhagen (DK))	25m	503-1-001 - Council Chamber	
	14:55	FCAL Collaboration Speaker: Yan Benhammou (Tel Aviv University (IL))	25m	503-1-001 - Council Chamber	
CLD	15:20	CLD Status and Next Steps. Tracking Speaker: Emilia Leogrande (CERN)	30m	503-1-001 - Council Chamber	
	15:50	CLD Status and Next Steps. Calorimetry Speaker: Oleksandr Viazlo (CERN)	30m	503-1-001 - Council Chamber	
	16:20	Coffee	30m		
IDEA	16:50	Tracking performance with the updated geometry of the IDEA detector Speaker: Giovanni F. Tassielli (INFN Lecce / Università del Salento)	25m	503-1-001 - Council Chamber	
	17:15	Expected performance of the IDEA dual-readout calorimeter Speakers: Gabriella Gaudio (INFN-Pavia), Gabriella Gaudio (Dipartimento di Fisica Nucleare e Teorica), Lorenzo Pezzotti (Universita and INFN (IT))	25m	503-1-001 - Council Chamber	
	17:40	IDEA test beam results Speaker: Romualdo Santoro (CERN)	25m	503-1-001 - Council Chamber	
	18:05	Discussion	55m	503-1-001 - Council Chamber	

Wednesday morning: Technologies / New Ideas

W. Riegler, MD

09:00 → 13:00	Experiments: Detector technologies	222-R-001	Join	222-R-001	
09:00	Detector concepts, relation of LHC detector R&D to e+e- detectors Speaker: Werner Riegler (CERN)	🕒 30m	✎		
09:30	Silicon development in ALICE Speaker: Luciano Musa (CERN)	🕒 30m	✎		
10:00	mu3e tracker and possibilities of future progress on light weight high resolution silicon trackers Speaker: Andre Schoening (Ruprecht Karls Universitaet Heidelberg (DE))	🕒 30m	✎		
10:30	Coffee	🕒 30m			
11:00	Liquid Argon Calorimetry for e+e- detectors Speaker: Martin Aleksa (CERN)	🕒 30m	✎		
11:30	CALICE Speaker: Frank Simon (Max-Planck-Institut fuer Physik)	🕒 30m	✎		
12:00	Magnet Technology development Speaker: Herman Ten Kate (CERN)	🕒 30m	✎		
12:30	Strategic R&D Programme on Technologies for future Experiments Speaker: Christian Joram (CERN)	🕒 30m	✎		

Wednesday morning: New Ideas/Technologies

F.Bedeschi, MD

Time	Topic	Speaker	Duration
14:00	Physics requirements: Z and WW electroweak	Speakers: Paolo Azzurri (S), Paolo Azzurri (INFN Sezione di Pisa, Universita' e Scuola Normale Superiore, P), Roberto Tenchini (INFN Sezione di Pisa, Universita' e Scuola Normale Superiore, P)	25m
14:25	Physics requirements: flavour physics	Speaker: Stephane Monteil (Universit�e Clermont Auvergne (FR))	25m
14:50	The Belle2 TOP PID detector	Speaker: Dr Roberto Mussa (INFN Torino)	20m
15:10	TORCH: a new concept for PID	Speaker: Roger Forty (CERN)	20m
15:30	Coffee		30m
16:00	Physics requirements: Higgs and top	Speaker: Krisztian Peters (Deutsches Elektronen-Synchrotron (DE))	25m
16:25	New developments in silicon pixel detectors	Speaker: Prof. Daniela Bortoletto (University of Oxford (GB))	25m
16:50	The SiD Detector - solutions and motivations	Speaker: Marcel Stanitzki (Deutsches Elektronen-Synchrotron (DE))	25m
17:15	Gas detector comparison and R&D	Speaker: Francesco Grancagnolo (INFN)	25m
17:40	Dual Readout Calorimeter options	Speaker: Roberto Ferrari (INFN Pavia (IT))	25m
18:05	Tile Dual Readout Calorimeter	Speaker: Yasar Onel (University of Iowa (US))	25m
18:30	Discussion		30m

Physics requirements

PID
Need for and
Possibilities

Si

Gas

Dual Read-out
Calorimetry

Thursday morning: Software

P. Azzi, S. Braibant

09:00	→ 12:35	Experiments: Simulation and reconstruction	222-R-001	Join	222-R-001	
09:00		Plans for Simulation and Reconstruction Speaker: Patrizia Azzi (INFN Padova (IT))	🕒 10m			
09:10		FCC Software Framework & vision for the future Speaker: Javier Cervantes Villanueva (CERN)	🕒 20m			
09:30		MDI and background studies with IDEA tracker Speaker: Niloufar Alipour Tehrani (CERN)	🕒 20m			
09:50		Tracking in the IDEA chamber Speaker: Giovanni F. Tassielli (INFN Lecce / Università del Salento)	🕒 20m			
10:10		Dual Readout Calorimeter Full Simulation Status Speaker: Lorenzo Pezzotti (Universita and INFN (IT))	🕒 20m			
10:30		COFFEE BREAK	🕒 30m			
11:00		CEPC simulations and tools Speaker: Manqi Ruan (Chinese Academy of Sciences (CN))	🕒 25m			
11:25		Fast Simulation status for IDEA detector Speaker: Elisa Fontanesi (Universita e INFN, Bologna (IT))	🕒 20m			
11:45		CLIC/CLD Software for simulation and event reconstruction Speakers: Andre Sailer (CERN), Marko Petric (CERN)	🕒 20m			
12:05		General Discussion and next steps	🕒 30m			