Report from Technical Coordination

Karsten Buesser

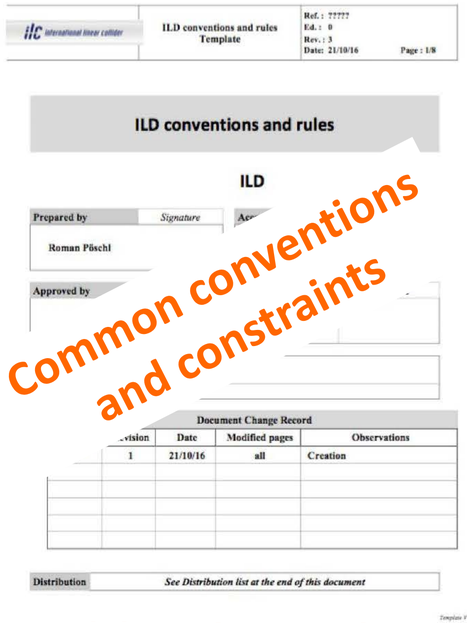
ILD General Meeting

04.04.2017

Interface Documents

- Document on ILD conventions and rules
  - CDI task
  - kick-off in April to have first version for Lyon
- Sub-detector Documents
  - activities in ECAL and HCAL groups
- Technical Design Document for sub-detectors
  - optional but recommended

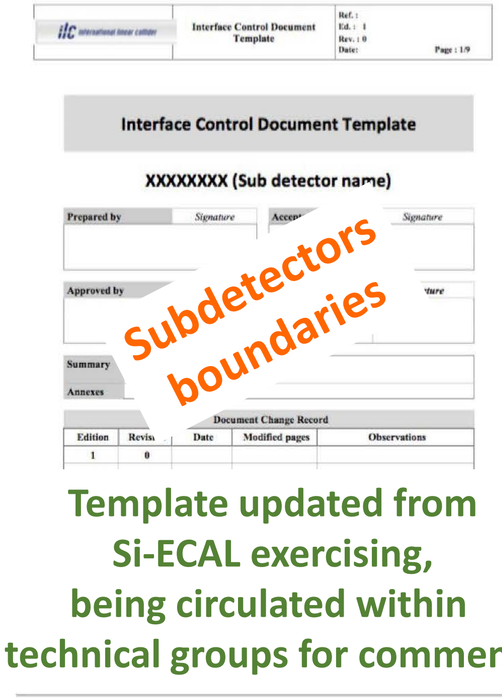
Document on ILD Conventions and rules



Elaboration starting

Obligatory document:
Author: Central Integration Group

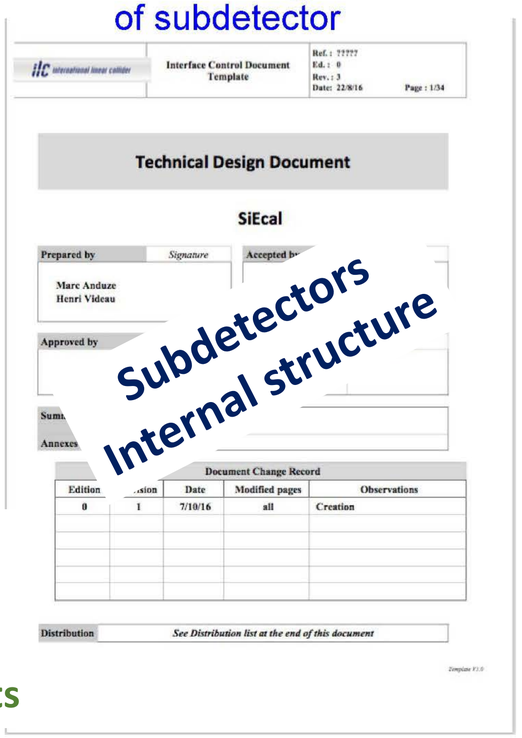
Actual ICD



Template updated from Si-ECAL exercising, being circulated within technical groups for comments

Obligatory document
Author: Subdetector group

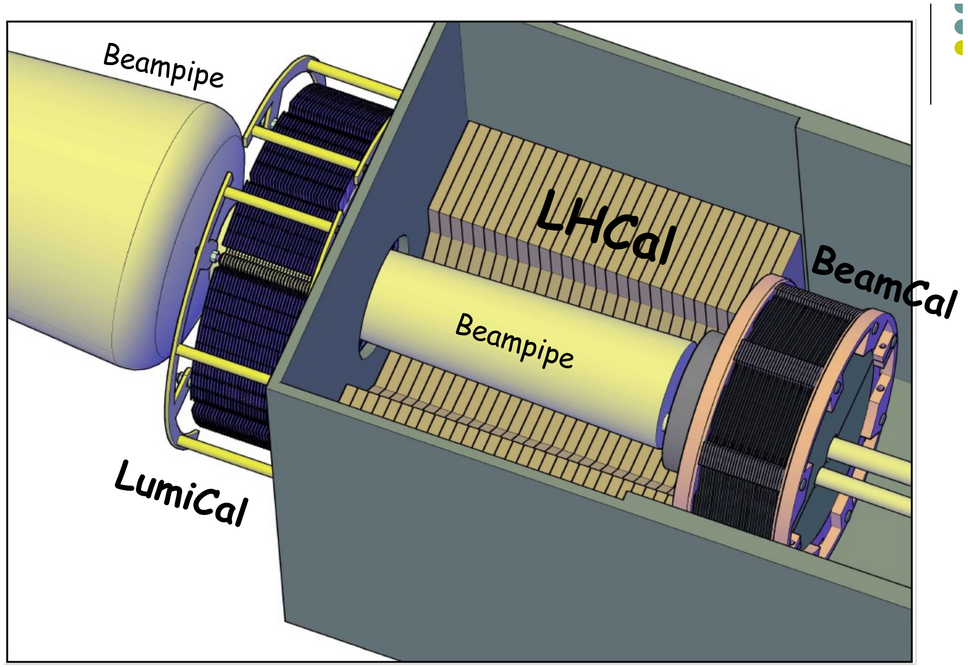
Technical Design Document of subdetector



Optional document
(Highly recommended)
Author: Subdetector group

Forward Region

- Implementation of forward region design status:
  - Collaboration between:
    - Strahinja Lukic, Bogdan Pawlik, Sergej Schuwalow (FCAL Collaboration)
    - Alejandro Perez Perez (Background Simulations)
    - Frank Gaede (Software)
- Status:
  - Update of geometries to new L* is almost ready
  - Final check of numbers is under way
  - After verification, background simulations can start



Anti-DID Task Force

- Detector Integrated Dipole
  - Aligns integral magnetic field along outgoing beam (crossing ang
  - Mainly to reduce backgrounds on BeamCal
- Task Force status
  - Background simulations are under way
  - Technical solutions for Anti-DID under study
    - „large dipole coil“: Uwe Schneekloth
      - simulation of magnetic fields
    - „small dipole coil“: Christophe Berriaud
      - conceptual design of magnet

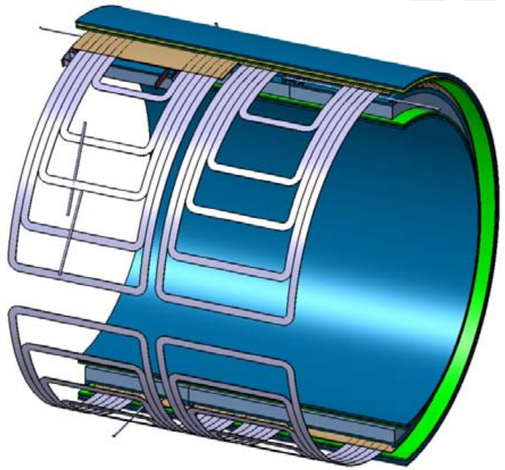
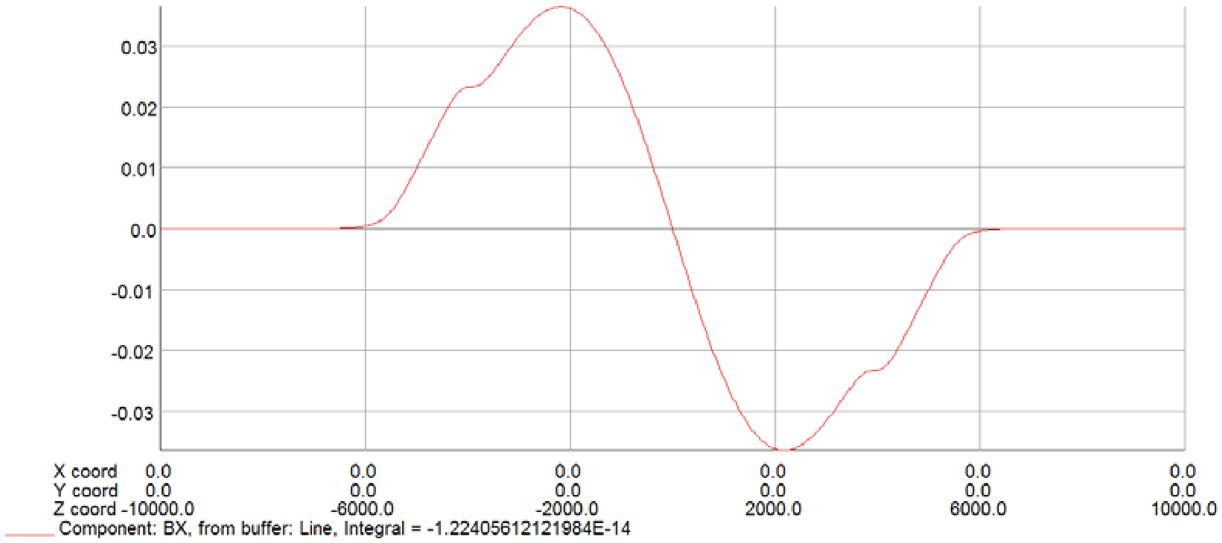


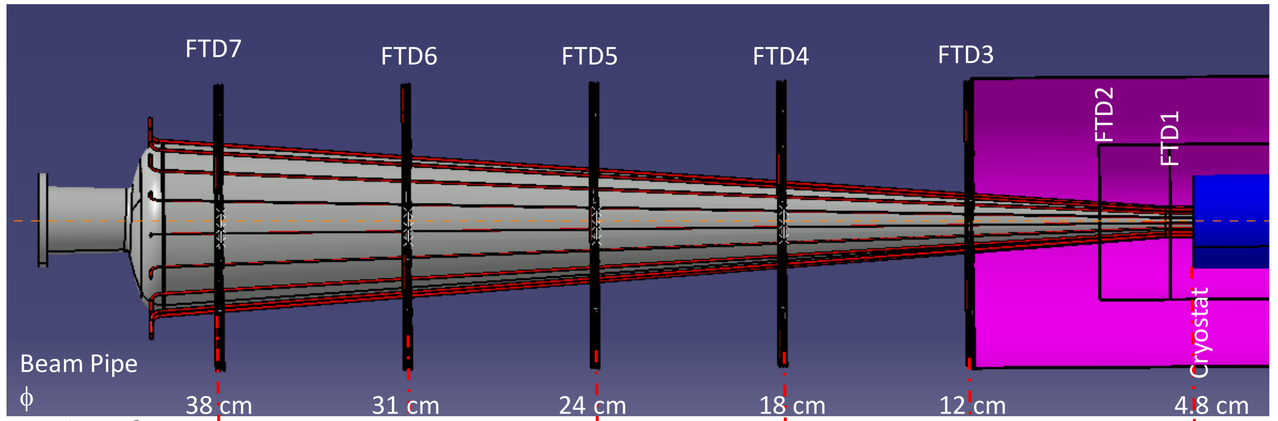
Figure 13: 3D view of the anti-DID (version 1).



Opera

Material around the Beampipe

- „Small coil“ Anti-DID would put a dipole magnet inside the tracking system around the beam pipe
- This makes only sense if the material budget does not compromise the detector performance
- Guideline: material that is anyhow foreseen in this region
  - >9kg of cables



So, with actual data : about 5% of X0 all along the beam pipe.

That means also

- ➢ *about 9 kg of material on each side*
- ➢ *a minimum gap between FTD supports and beam pipe of 2 cm for path of all the cables….*

And SIT/ FTD1&2 services not included…

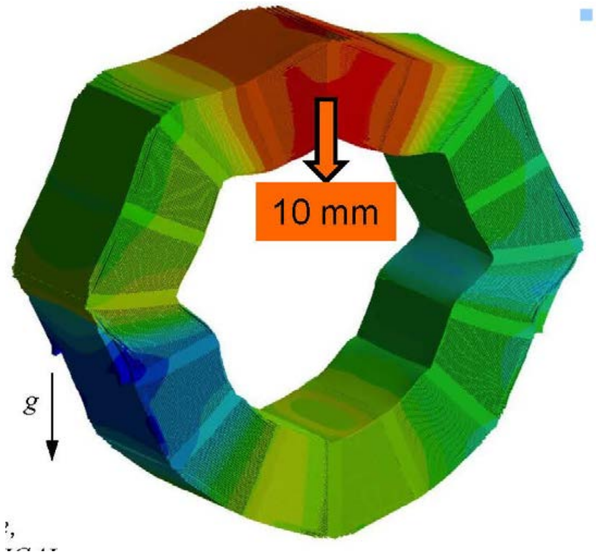
„VT“ Task Force

- Mechanical design of HCAL absorber structure
- Main emphasis is on
  - mechanical stability
  - impact of cracks and support
  - electronics access and cable paths
- Mechanical CAD models of HCAL and ECAL have been exchanged between french groups and DESY to allow for cross-simulations of full wheels (HCAL+ECAL)
  - expert meeting on April 13th to discuss results

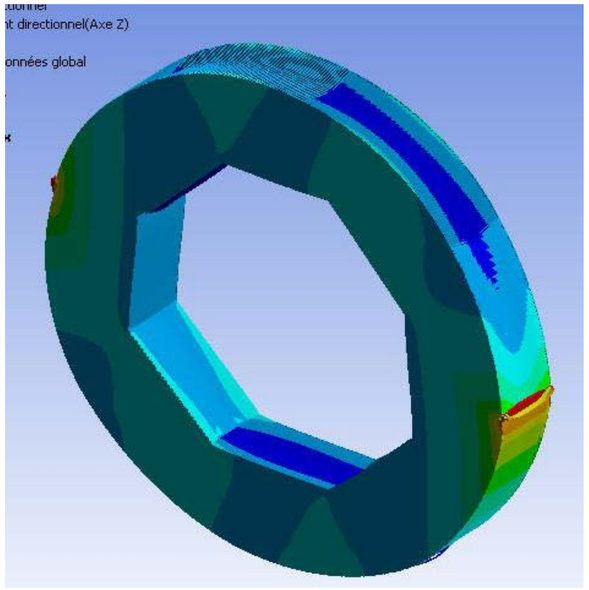
“VT TASK FORCE”

Investigate the two proposed HCAL mechanical options

TESLA



Videau



Technical Sessions at Lyon Workshop

- Status of Simulation Models

Wed 26/4

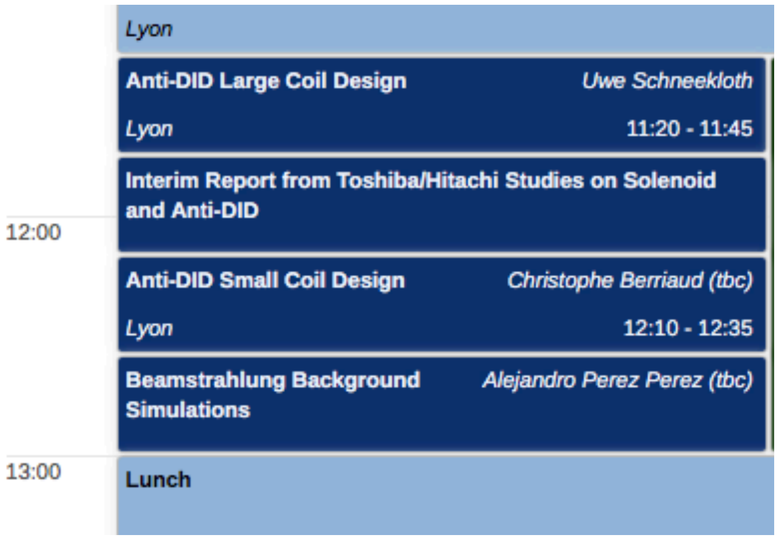
09:00	**VXD, SIT, SET, FTD**	*Marcel Vos (tbc)*
	Lyon	09:00 - 09:40
	TPC	*Dimitra Tsionou (tbc)*
	Lyon	09:40 - 10:05
10:00	**Beam Pipe, Cables and Services**	*Karsten Buesser*
	Lyon	10:05 - 10:30
	Coffee	
	Lyon	10:40 - 10:55
11:00	**LCal, LHCal, BeamCal**	*Bogdan Pawlik (tbc)*
	Lyon	10:55 - 11:20
	SiW/SciW-ECal, AHCal,SDHcal	*Daniel Jeans (tbc)*
	Lyon	11:20 - 11:55
12:00	**Hybrid RPC/Sci Simulations - Impact - (SDHcal)**	
	Lyon	11:55 - 12:15
	Hybrid RPC/Sci Simulations - Impact (AHcal)	
	Lyon	12:15 - 12:35
	Muon, Coil	*Nicola D'Ascenzo (tbc)*
	Lyon	12:35 - 12:55

- MDI and Subdetector Status Reports

	Polarimetry	*Robert Karl*
	Lyon	14:30 - 14:55
15:00	**MDI, Detector Integration, Interface Documents**	*Karsten Buesser*
	Lyon	14:55 - 15:20
	Vertex Detector	
	Lyon	15:20 - 15:45
	Tracking System	
16:00	*Lyon*	15:45 - 16:10
	Coffee	
	Lyon	16:10 - 16:30
	ECAL	
	Lyon	16:30 - 16:55
17:00	**HCAL**	
	Lyon	16:55 - 17:20
	Very Forward Systems	
	Lyon	17:20 - 17:45
	Iron Instrumentation	
18:00	*Lyon*	17:45 - 18:10
	DAQ	
	Lyon	18:10 - 18:30

Technical Sessions at Lyon Workshop

- Anti-DID Task Force



- VT Task Force

Mini-Workshop May 16, KEK

Mini-Workshop on ILC Infrastructure and CFS for Physics and Detectors

May 16, 2017
KEK
Asia/Tokyo timezone

- Overview
- Timetable
- Registration
- Participant List

Support
karsten.buesser@desy.de

This Mini-Workshop is dedicated to discussions on the detector driven infrastructure needs for the ILC campus at the IP and at the central lab. Topics to be discussed include:

- Latest news on the IP area, results from test drillings, adaptations of the surface infrastructure to the new site;
- Requirements from ILD and SiD for surface infrastructure: assembly and buffer space, cranes, transportation;
- Detector assembly plans with interdependencies on required infrastructures;
- Implications of machine and detector staging scenarios;
- Solenoid coil and Anti-DID;
- Requirements for central lab.

Starts May 16, 2017 09:00
Ends May 16, 2017 18:00
Asia/Tokyo

KEK
Ni-Go-Kan Building (K02), Room 101

Karsten Buesser
Yasuhiro Sugimoto

Materials

There are no materials yet.

Vidyo connection for the workshop:
https://vidyoportal.cern.ch/join/JJ1s0srYdnjOjs8l1DF75zqVEw

Registration
You have registered for this event.
See details >