

LDC meeting at Snowmass

Report of Contributions

Contribution ID: 1

Type: **not specified**

The B-field and the tracker

Monday 22 August 2005 17:10 (20 minutes)

What quality of the field do we need in the TPC, SIT, and other detectors? How can we measure and monitor the field distortions at the required level of accuracy? Can the large distortions in the large crossing angle be accounted for? Can control samples be used to improve the knowledge of the field map? Does it make sense to eliminate the plug, at the cost of a shorter magnet and thus a less homogeneous field?

Primary author: DAN PETERSON

Presenter: DAN PETERSON

Session Classification: Discussion with concept groups

Contribution ID: 2

Type: **not specified**

Calorimetry and gaps

Monday 22 August 2005 17:00 (10 minutes)

How important are gaps between the calorimeter components? How important are gaps between the calorimeters and other components such as the TPC? What is the penalty for a round TPC inside an octagonal ECAL, if any? How efficient is the TPC for detecting backscattered particles. How important are these?

What is the optimal transition barrel –end cap done? Is the current scheme of a long barrel in front of the end cap optimal? Are there alternatives?

Primary author: MIKE RONAN

Presenter: MIKE RONAN

Session Classification: Discussion with concept groups

Contribution ID: 3

Type: **not specified**

On the magnetic field requirements for a TPC

Monday 22 August 2005 17:30 (15 minutes)

Primary author: RON SETTLES

Presenter: RON SETTLES

Session Classification: Discussion with concept groups

Contribution ID: 4

Type: **not specified**

ECAL- HCAL optimisation

Tuesday 23 August 2005 17:00 (10 minutes)

Primary author: FELIX SEFKOW

Presenter: FELIX SEFKOW

Session Classification: Discussion with concept groups

Contribution ID: 5

Type: **not specified**

Review of LDC status and plans

Tuesday 23 August 2005 17:20 (10 minutes)

Primary author: ALL

Presenter: ALL

Session Classification: Discussion with concept groups

Contribution ID: 6

Type: **not specified**

Calorimeter optimization

Tuesday 23 August 2005 17:10 (10 minutes)

Primary author: HENRI VIDEAU

Presenter: HENRI VIDEAU

Session Classification: Discussion with concept groups

Contribution ID: 7

Type: **not specified**

open for working group discussions

Wednesday 24 August 2005 08:30 (1 hour)

Session Classification: LDC

Contribution ID: 8

Type: **not specified**

report from forward detectors discussion group + discussion

Thursday 25 August 2005 08:30 (1 hour)

Primary author: WOLFGANG LOHMANN

Presenter: WOLFGANG LOHMANN

Session Classification: LDC

Contribution ID: 9

Type: **not specified**

report from PFA discussion group + discussion

Thursday 25 August 2005 10:00 (2 hours)

Primary author: MARK THOMSON / ALEXEI RASPEREZA

Presenter: MARK THOMSON / ALEXEI RASPEREZA

Session Classification: LDC

Contribution ID: **10**

Type: **not specified**

report from magnetic field discussion group + discussion

Thursday 25 August 2005 16:00 (30 minutes)

Primary author: DAN PETERSON

Presenter: DAN PETERSON

Session Classification: LDC

Contribution ID: **11**

Type: **not specified**

report from "Si" tracking discussion group + discussion

Thursday 25 August 2005 16:30 (1 hour)

Primary author: AURORE SAVOY-NAVARRO

Presenter: AURORE SAVOY-NAVARRO

Session Classification: LDC

Contribution ID: **12**

Type: **not specified**

The LDC concept

Monday 15 August 2005 14:00 (20 minutes)

Primary author: DEAN KARLEN

Presenter: DEAN KARLEN

Session Classification: Detector Plenary

Contribution ID: **13**

Type: **not specified**

Introduction

Tuesday 16 August 2005 08:30 (5 minutes)

Primary author: TIES BEHNKE

Presenter: TIES BEHNKE

Session Classification: Introductory Session

Contribution ID: **14**

Type: **not specified**

The VTX detector within LDC

Tuesday 16 August 2005 08:35 (25 minutes)

Primary author: STEVE WORM

Presenter: STEVE WORM

Session Classification: Introductory Session

Contribution ID: 15

Type: **not specified**

The tracking system in LDC

Tuesday 16 August 2005 09:00 (25 minutes)

Primary author: TIES BEHNKE

Presenter: TIES BEHNKE

Session Classification: Introductory Session

Contribution ID: **16**

Type: **not specified**

Calorimetry for a PF detector

Tuesday 16 August 2005 09:25 (30 minutes)

Primary author: STEVE MAGILL

Presenter: STEVE MAGILL

Session Classification: Introductory Session

Contribution ID: 17

Type: **not specified**

working group breakout discussions

Wednesday 24 August 2005 14:00 (3h 30m)

Session Classification: LDC discussion session

Contribution ID: **18**

Type: **not specified**

LDC costing discussion

Wednesday 24 August 2005 13:30 (30 minutes)

Primary author: HENRI VIDEAU

Presenter: HENRI VIDEAU

Session Classification: LDC discussion session

Contribution ID: **19**

Type: **not specified**

discussion on physics case for granularity

Wednesday 24 August 2005 10:40 (50 minutes)

Primary author: HENRI VIDEAU

Presenter: HENRI VIDEAU

Session Classification: Joint GLD LDC SiD session on particle flow

Contribution ID: **20**

Type: **not specified**

Gamma finder

Wednesday 24 August 2005 10:00 (15 minutes)

Primary author: FUJIKAWA

Presenter: FUJIKAWA

Session Classification: Joint GLD LDC SiD session on particle flow

Contribution ID: **21**

Type: **not specified**

PFA algorithm

Wednesday 24 August 2005 10:20 (15 minutes)

Primary author: YOSHIOKA

Presenter: YOSHIOKA

Session Classification: Joint GLD LDC SiD session on particle flow

Contribution ID: 22

Type: **not specified**

Introduction into ILC software for LDC

Tuesday 16 August 2005 10:30 (30 minutes)

Primary author: FRANK GAEDE

Presenter: FRANK GAEDE

Session Classification: Introduction into Tools for LDC

Contribution ID: **23**

Type: **not specified**

MARLIN-Reco

Tuesday 16 August 2005 11:00 (15 minutes)

Primary author: STEVE APLIN

Presenter: STEVE APLIN

Session Classification: Introduction into Tools for LDC

Contribution ID: **24**

Type: **not specified**

Tutorial

Tuesday 16 August 2005 11:15 (45 minutes)

Primary author: MANY

Presenter: MANY

Session Classification: Introduction into Tools for LDC

Contribution ID: 25

Type: **not specified**

Vertex Detector issues

Wednesday 17 August 2005 08:30 (10 minutes)

Vertex detector configuration, overall review of the
different options on the market

Primary author: MARCO BATTAGLIA

Presenter: MARCO BATTAGLIA

Session Classification: Facing LDC questions and planning the work

Contribution ID: 26

Type: **not specified**

Particle Flow review

Wednesday 17 August 2005 09:30 (10 minutes)

What is the possible particle flow performance? What have we achieved? (this will be a brief summary of results which will be presented in more detail in the PF session on Monday)

Primary author: ALEXEI RASPEREZA

Presenter: ALEXEI RASPEREZA

Session Classification: Facing LDC questions and planning the work

Contribution ID: 27

Type: **not specified**

Calorimeter optimisation

Wednesday 17 August 2005 09:40 (10 minutes)

What is optimal thickness of the ECAL/ HCAL? What is the optimal sampling structure? Is the approach used in the LDC detector so far ok, can it be improved?

Primary author: GRAHAM WILSON

Presenter: GRAHAM WILSON

Session Classification: Facing LDC questions and planning the work

Contribution ID: **28**

Type: **not specified**

The Muon System

Wednesday 17 August 2005 09:50 (10 minutes)

What is the basic design of the muon system? What can be improved?

Primary author: MARCELLO PICCOLO

Presenter: MARCELLO PICCOLO

Session Classification: Facing LDC questions and planning the work

Contribution ID: 29

Type: **not specified**

Physics potential of vertex detector as function of beam pipe radius

Wednesday 17 August 2005 08:40 (10 minutes)

The role of the beam pipe radius and its optimisation for the VTX detector

Primary author: SONJA HILLERT

Presenter: SONJA HILLERT

Session Classification: Facing LDC questions and planning the work

Contribution ID: **30**

Type: **not specified**

TPC issues

Wednesday 17 August 2005 08:50 (10 minutes)

How large should the TPC be? How close should the ECAL end cap be to the endplate of the TPC?
How much material in front of the end cap is acceptable? How much material can be tolerated in front of the barrel calorimeter?

Primary author: STEVE APLIN

Presenter: STEVE APLIN

Session Classification: Facing LDC questions and planning the work

Contribution ID: **31**

Type: **not specified**

SI-based tracking in LDC

Wednesday 17 August 2005 09:10 (10 minutes)

The SIT was introduced for track merging and for V0 efficiency reasons. These studies should be redone. Is the current SIT and SET layout optimal? Which role does the material play in the overall track reconstruction?

Primary author: AURORA SAVOY NAVARRO

Presenter: AURORA SAVOY NAVARRO

Session Classification: Facing LDC questions and planning the work

Contribution ID: 32

Type: **not specified**

Forward Tracking

Wednesday 17 August 2005 09:00 (10 minutes)

In the forward direction, the FTD is currently a system of pixels and disks. How important is its material. How stable is forward tracking? What are the important performance goals for tracking in the forward region?

Primary author: KLAUS MOENIG

Presenter: KLAUS MOENIG

Session Classification: Facing LDC questions and planning the work

Contribution ID: 33

Type: **not specified**

Forward tracking and the TPC

Wednesday 17 August 2005 09:20 (15 minutes)

How important is the FCH behind the TPC? Do we need stand-alone tracking capability in there, or is a simple device which adds one or two hits sufficient? Which technology is optimal for the FCH?

Primary author: LEE SAWYER

Presenter: LEE SAWYER

Session Classification: Facing LDC questions and planning the work

Contribution ID: 34

Type: **not specified**

LDC answers to the MDI questions

Wednesday 17 August 2005 11:10 (30 minutes)

Primary author: KARSTEN BUESSER

Presenter: KARSTEN BUESSER

Session Classification: Facing LDC questions II: preparing the joint MDI s

Contribution ID: 35

Type: **not specified**

Machine constraints on the magnetic field

Wednesday 17 August 2005 11:00 (10 minutes)

Primary author: KARSTEN BUESSER

Presenter: KARSTEN BUESSER

Session Classification: Facing LDC questions II: preparing the joint MDI s

Contribution ID: **36**

Type: **not specified**

LDC experimental infrastructure

Wednesday 17 August 2005 10:30 (30 minutes)

Primary author: KLAUS SINRAM (DESY)

Presenter: KLAUS SINRAM (DESY)

Session Classification: Facing LDC questions II: preparing the joint MDI s

Contribution ID: 37

Type: **not specified**

organizing LDC

Wednesday 17 August 2005 16:00 (1h 30m)

Set up working groups for the main areas of detector optimisation. Prioritize the questions discussed in the morning session. Define goals for snowmass (and beyond).

Primary author: ALL

Presenter: ALL

Session Classification: Organizing LDC at snowmass

Contribution ID: **38**

Type: **not specified**

Review of LDC status and work

Thursday 18 August 2005 17:30 (15 minutes)

Primary author: ALL

Presenter: ALL

Session Classification: Discussion with concept groups

Contribution ID: 39

Type: **not specified**

GLD optimisation

Friday 19 August 2005 17:00 (30 minutes)

Session Classification: Discussion with concept groups

Contribution ID: **40**

Type: **not specified**

LDC discussion

Friday 19 August 2005 18:00 (15 minutes)

Session Classification: Discussion with concept groups