

INTERNATIONAL LARGE DETECTOR

IDR

ILD Detector Collaboration

2018

ILD Editors

Main Editors:

Ties Behnke, Kiyotomo Kawagoe

Tracking System:

Calorimeter System:

Outer Detector System:

Data Acquisition:

Machine Detector Interface:

Integration:

Karsten Buesser

Alignment:

Software:

Frank Gaede, Akiya Miyamoto

Performance:

Keisuke Fujii, Jenny List

Costing:

Henri Videau, Karsten Buesser

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Chapter 1

Introduction

Ties Behnke, Kiyotomo Kawagoe
2 pages

Chapter 2

Science with ILC

Keisuke Fujii, Jenny List
2 pages

Executive summary of the scientific goals of the ILC. Emphasis on 250 GeV. Prepare connection to choice of physics benchmarks, where details will of course come in the actual performance section.

Chapter 3

The ILC Environment

Karsten Buesser, Keisuke Fujii
3 pages

Chapter 4

Detector Layout and Technologies

Claude Vallee
Claude Vallee, Karsten
Buesser
1 pages

4.1 Overall structure of the detector

Claude Vallee, Karsten
Buesser
1 pages

4.1.1 Global structure and parameters

Subdetector technical con-
vener
4 pages

4.1.2 Subdetecor layout

Subdetector convener
pages

4.2 Subdetector technology status

Yasuhiro Sugimoto, Marc Winter
3 pages

4.2.1 Vertex detector

Alberto Ruiz
3 pages

4.2.2 Silicon inner tracking detectors

Paul Colas
3 pages

4.2.3 Time projection chamber

Jean Claude Brient, Tohru Takeshita, Felix Sefkow, Imad Laktineh
5 pages

4.2.4 Calorimeters

Ahron Levy
2 pages

4.2.5 Very forward detectors

4.2.6 Iron instrumentation

4.2. Valery Saveliev, Uwe Schneekloth
1 pages

Chapter 5

ILD Global Integration

5.1	Internal ILD integration
5.2	external ILD integration
5.2.1	Cavern ancillary services
5.2.2	Data acquisition
5.3	Mechanical structure and studies
5.4	Coil and yoke studies
5.5	Beam background studies
5.6	Alignment/ calibration procedures

Karsten Buesser
Karsten Buesser
Yasuhiro Sugimoto
Yasuhiro Sugimoto
Matthew Wing, Taikan Sue-
Felix Sefkow, Henri Videau
Karsten Buesser, Uwe
Daniel Jeans
Graham Wilson
1 pages

Chapter 6

Physics and Detector Modelling

6.1	Modelling of ILC Conditions and Physics Processes
6.2	Detector Modelling
6.3	Reconstruction Tools

Chapter 7

Detector and Physics Performance

Frank Gaede

Graham Wilson, Frank Gaede,

Keisuke Fujii, Jenny List

10 pages

7.1	Tracking and Particle Flow
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Chapter 8

Costing

Chapter 9

Summary

Bibliography