

Engineering review of the NEXT-100 experiment

Report of Contributions

Contribution ID: 0

Type: **not specified**

NEXT-100 general design and performance goals – JJ Gomez-Cadenas

Tuesday, 4 December 2012 09:00 (15 minutes)

Session Classification: Overview

Contribution ID: 1

Type: **not specified**

Canfranc Laboratory infrastructure - Igor Liubarsky

Tuesday, 4 December 2012 09:15 (5 minutes)

Session Classification: Overview

Contribution ID: 2

Type: **not specified**

Budget, schedule cost – instant overview - Igor Liubarsky

Tuesday, 4 December 2012 09:20 (10 minutes)

Session Classification: Overview

Contribution ID: 3

Type: **not specified**

Tracking plane electronics – José F. Toledo Alarcón, Azriel Goldschmidt

Tuesday, 4 December 2012 11:30 (15 minutes)

Session Classification: Electronics

Contribution ID: 4

Type: **not specified**

FNAL SiPM electronic concept – Paul Rubinov

Tuesday, 4 December 2012 11:45 (15 minutes)

Session Classification: Electronics

Contribution ID: 5

Type: **not specified**

Energy plane electronics – José F. Toledo Alarcón, Azriel Goldschmidt

Tuesday, 4 December 2012 12:00 (15 minutes)

Session Classification: Electronics

Contribution ID: 6

Type: **not specified**

Monitoring/slow control – Dave Nygren

Tuesday, 4 December 2012 12:15 (15 minutes)

Session Classification: Electronics

Contribution ID: 7

Type: **not specified**

Sub-system and system electro-mechanical assembly in Canfranc – Igor Liubarsky, Derek Shuman

Tuesday, 4 December 2012 15:30 (20 minutes)

Session Classification: Integration, Environmental and safety issues

Contribution ID: 8

Type: **not specified**

Environmental and safety issues

Tuesday, 4 December 2012 15:50 (10 minutes)

Session Classification: Integration,Environmental and safety issues

Contribution ID: 9

Type: **not specified**

Calibrations - John Hauptman

Tuesday, 4 December 2012 13:30 (30 minutes)

- a. Calibration of tracking plane
 - i. SiPM gain stability
 - ii. SiPM sensitivity
- b. Calibration of energy plane
 - i. Electronic stability/gain
 - ii. Electroluminescent conversion stability
 - iii. Conversion from ADC units to energy
- c. Discussion

Session Classification: Other Subsystems

Contribution ID: **10**

Type: **not specified**

Gas system - Igor Liubarsky

Tuesday, 4 December 2012 14:00 (30 minutes)

- a. Regular operation
- b. Flow pattern in detector
- c. Normal and emergency recovery
- d. Leak sensing and mitigation

Session Classification: Other Subsystems

Contribution ID: 11

Type: **not specified**

Radiopurity campaign & backgrounds – JJ Gomez-Cadenas

Tuesday, 4 December 2012 14:30 (30 minutes)

Session Classification: Other Subsystems

Contribution ID: 12

Type: **not specified**

Mechanical Engineering aspects of NEXT100 - Derek Shuman

Tuesday, 4 December 2012 09:30 (1h 30m)

Session Classification: Mechanics

Contribution ID: 13

Type: **not specified**

Copper liner - Derek Shuman

Contribution ID: 14

Type: **not specified**

Energy plane mechanics - Derek Shuman

Contribution ID: 15

Type: **not specified**

Energy plane, cables, and feed-through design - Derek Shuman

Contribution ID: **16**

Type: **not specified**

Field cage & insulator - Derek Shuman

Contribution ID: 17

Type: **not specified**

HV feed-through - Derek Shuman

Contribution ID: **18**

Type: **not specified**

EL planes - Derek Shuman

Contribution ID: **19**

Type: **not specified**

Tracking plane mechanics - Derek Shuman

Contribution ID: 20

Type: **not specified**

Tracking plane, cables, and feed-through design - Derek Shuman

Contribution ID: 21

Type: **not specified**

Capture of unresolved issues

Tuesday, 4 December 2012 16:00 (20 minutes)

Session Classification: Discussion

Contribution ID: 22

Type: **not specified**

Cost issues - Igor Liubarsky

Tuesday, 4 December 2012 16:20 (20 minutes)

- a. Estimates of missing resources
- b. Contingency plans
- c. European and US contexts

Session Classification: Discussion

Contribution ID: 23

Type: **not specified**

Schedule - JJ Gomez-Cadenas

Tuesday, 4 December 2012 16:40 (20 minutes)

Session Classification: Discussion

Contribution ID: 24

Type: **not specified**

FWP proposal – Dave Nygren

Tuesday, 4 December 2012 17:00 (20 minutes)

Session Classification: Discussion

Contribution ID: 25

Type: **not specified**

Can NEXT-100 run with molecular additives?

Tuesday, 4 December 2012 17:20 (20 minutes)

Session Classification: Discussion

Contribution ID: 26

Type: **not specified**

Priorities

Tuesday, 4 December 2012 17:40 (20 minutes)

Session Classification: Discussion

Contribution ID: 27

Type: **not specified**

Mechanics:

- a. Pressure vessel
- b. Copper liner
- c. Energy plane mechanics
- d. Energy plane, cables, and feed-through design
- e. Field cage & insulator
- f. HV feed-through
- g. EL planes
- h. Tracking plane mechanics
- i. Tracking plane, cables, and feed-through design

Primary author: SHUMAN, Derek (LBNL)

Contribution ID: 28

Type: **not specified**

Canfranc Laboratory infrastructure - Igor Liubarski

Co-author: LIUBARSKY, Igor (Valencia)

Contribution ID: 29

Type: **not specified**

Mechanics - David Shuman

- a. Pressure vessel
- b. Copper liner
- c. Energy plane mechanics
- d. Energy plane, cables, and feed-through design
- e. Field cage & insulator
- f. HV feed-through
- g. EL planes
- h. Tracking plane mechanics
- i. Tracking plane, cables, and feed-through design

Contribution ID: **30**

Type: **not specified**

Budget, schedule cost – instant overview - Igor Liubarski

Contribution ID: 31

Type: **not specified**

T-100 general design and performance goals - JJ Gomez-Cadenas