

# **Snowmass: Seattle Energy Frontier Workshop**

## **Report of Contributions**

Contribution ID: 0

Type: **not specified**

## Welcome

*Sunday, 30 June 2013 08:30 (10 minutes)*

**Presenter:** Prof. WATTS, Gordon (University of Washington)

**Session Classification:** Plenary

Contribution ID: 1

Type: **not specified**

## Introduction

*Sunday, 30 June 2013 08:40 (10 minutes)*

**Presenter:** PESKIN, Michael (SLAC)

**Session Classification:** Plenary

Contribution ID: 2

Type: **not specified**

# Higgs Working Group Report

*Sunday, 30 June 2013 08:50 (25 minutes)*

**Presenter:** QIAN, Jianming (University of Michigan)

**Session Classification:** Plenary

Contribution ID: 3

Type: **not specified**

## Top Working Group Report

*Sunday, 30 June 2013 09:15 (25 minutes)*

**Presenter:** Prof. AGASHE, Kaustubh (University of Maryland)

**Session Classification:** Plenary

Contribution ID: 4

Type: **not specified**

## **Electroweak Working Group Report**

*Sunday, 30 June 2013 09:40 (25 minutes)*

**Presenter:** Prof. WACKEROTH, Doreen (University at Buffalo, SUNY)

**Session Classification:** Plenary

Contribution ID: 5

Type: **not specified**

## QCD Working Group Report

*Sunday, 30 June 2013 10:35 (25 minutes)*

**Presenters:** CAMPBELL, John (Fermilab); Dr CAMPBELL, John (University of Glasgow)

**Session Classification:** Plenary

Contribution ID: 6

Type: **not specified**

## **New Particles Working Group Report**

*Sunday, 30 June 2013 11:00 (25 minutes)*

**Presenters:** Prof. LUTY, Markus (University of California Davis); LUTY, Markus (UC Davis)

**Session Classification:** Plenary



Contribution ID: 7

Type: **not specified**

## Flavor Working Group Report

*Sunday, 30 June 2013 11:25 (25 minutes)*

**Presenter:** Prof. PRELL, Soeren (Iowa State University)

**Session Classification:** Plenary

Contribution ID: 8

Type: **not specified**

## Structure of the P5 Process

*Sunday, 30 June 2013 12:10 (20 minutes)*

**Presenter:** PATWA, Abid

**Session Classification:** Plenary

Contribution ID: 9

Type: **not specified**

## ATLAS Future

*Monday, 1 July 2013 08:30 (45 minutes)*

**Presenter:** Prof. NIELSEN, Jason (U C Santa Cruz)

**Session Classification:** Plenary

Contribution ID: **10**

Type: **not specified**

## **CMS Future**

*Monday, 1 July 2013 09:15 (45 minutes)*

**Presenter:** Prof. OLSEN, James (Princeton University)

**Session Classification:** Plenary

Contribution ID: 11

Type: **not specified**

## Linear Collider Board

*Monday, 1 July 2013 10:30 (45 minutes)*

**Presenter:** Prof. KOMAMIYA, Sachio (University of Tokyo)

**Session Classification:** Plenary

Contribution ID: **12**

Type: **not specified**

## ATLAS Future

Contribution ID: 13

Type: **not specified**

## Other Future Facilities

*Monday, 1 July 2013 11:15 (45 minutes)*

**Presenter:** Dr PALMER, Mark (Fermilab)

**Session Classification:** Plenary

Contribution ID: 14

Type: **not specified**

## Quark Flavor Physics

*Monday, 1 July 2013 16:00 (30 minutes)*

**Presenter:** ZUPAN, Jure

**Session Classification:** Other Frontier Overlaps



Contribution ID: 15

Type: **not specified**

## Lepton Flavor Physics

*Monday, 1 July 2013 16:30 (30 minutes)*

**Presenter:** BABU, K.S. (Oklahoma State University)

**Session Classification:** Other Frontier Overlaps

Contribution ID: 16

Type: **not specified**

## **Baryogenesis**

*Monday, 1 July 2013 17:00 (30 minutes)*

**Presenter:** Prof. NELSON, Ann (University of Washington)

**Session Classification:** Other Frontier Overlaps

Contribution ID: 17

Type: **not specified**

## Dark Matter

*Monday, 1 July 2013 17:30 (30 minutes)*

**Presenter:** Prof. KAPLINGHAT, Manoj (University of California, Irvine)

**Session Classification:** Other Frontier Overlaps

Contribution ID: **18**

Type: **not specified**

## **US Physicists at Accelerators Abroad**

*Tuesday, 2 July 2013 08:30 (30 minutes)*

**Presenter:** PESKIN, Michael (SLAC)

**Session Classification:** Plenary

Contribution ID: 19

Type: **not specified**

## **Instrumentation for high-luminosity hadron colliders**

*Tuesday, 2 July 2013 09:00 (45 minutes)*

**Presenter:** Prof. HEINTZ, Ulrich (Brown University)

**Session Classification:** Plenary

Contribution ID: 20

Type: **not specified**

## Panel Discussion

*Tuesday, 2 July 2013 16:30 (1h 30m)*

Jim Brau, Beate Heinemann, Ron Lipton, Christopher Hill, LinTao Wang, Hitoshi Murayama

**Presenters:** Prof. MURAYAMA, Hitoshi (University of California, Berkeley & IPMU, University of Tokyo); BRAU, James (Univ. of Oregon); Prof. WANG, Liantao (University of Chicago); Dr LIPTON, Ronald (Fermilab)

**Session Classification:** Plenary

Contribution ID: 21

Type: **not specified**

## **New Particles Working Group Report**

*Wednesday, 3 July 2013 08:50 (20 minutes)*

**Presenter:** Prof. WHITESON, Daniel (UC Irvine)

**Session Classification:** Plenary

Contribution ID: 22

Type: **not specified**

## Flavor Working Group Report

*Wednesday, 3 July 2013 09:10 (20 minutes)*

**Presenter:** Prof. PRELL, Soeren (Iowa State University)

**Session Classification:** Plenary



Contribution ID: 23

Type: **not specified**

## QCD Working Group Report

*Wednesday, 3 July 2013 09:30 (20 minutes)*

**Presenter:** Prof. HATAKEYAMA, Kenichi (Baylor University)

**Session Classification:** Plenary

Contribution ID: 24

Type: **not specified**

## **Electroweak Working Group Report**

*Wednesday, 3 July 2013 10:20 (20 minutes)*

**Presenter:** Prof. KOTWAL, Ashutosh (Duke University)

**Session Classification:** Plenary

Contribution ID: 25

Type: **not specified**

## Top Working Group Report

*Wednesday, 3 July 2013 10:40 (20 minutes)*

**Presenter:** Prof. GERBER, Cecilia (UIC)

**Session Classification:** Plenary

Contribution ID: 26

Type: **not specified**

# Higgs Working Report

*Wednesday, 3 July 2013 08:30 (20 minutes)*

**Presenter:** Prof. GRITSAN, Andrei (Johns Hopkins University)

**Session Classification:** Plenary

Contribution ID: 27

Type: **not specified**

## Conclusions and Summary

*Wednesday, 3 July 2013 11:00 (30 minutes)*

**Presenter:** Prof. BROCK, Raymond (Michigan State University)

**Session Classification:** Plenary

Contribution ID: **28**

Type: **not specified**

**test**

**Presenter:** Prof. DAWSON, Sally

Contribution ID: 29

Type: **not specified**

## **Theory uncertainties and Higgs widths/couplings**

*Tuesday, 2 July 2013 14:00 (15 minutes)*

**Presenter:** Dr HEINEMEYER, Sven (IFCA (CSIC, Santander))

**Session Classification:** Higgs

Contribution ID: 30

Type: **not specified**

# What do we learn from the measurement of double Higgs production

*Sunday, 30 June 2013 14:50 (15 minutes)*

**Presenter:** Mr KUMAR, Kunal (Northwestern University)

**Session Classification:** Higgs



Contribution ID: **31**

Type: **not specified**

## **Higgs total width with interferometry (remote)**

*Sunday, 30 June 2013 14:30 (15 minutes)*

**Presenter:** LI, Ye (SLAC)

**Session Classification:** Higgs

Contribution ID: 32

Type: **not specified**

## ttH in non-H->bb channels

*Sunday, 30 June 2013 14:15 (12 minutes)*

**Presenter:** Dr ONYISI, Peter (University of Texas)

**Session Classification:** Higgs

Contribution ID: 33

Type: **not specified**

## ttH (remote)

*Sunday, 30 June 2013 14:00 (12 minutes)*

**Presenter:** GUINDON, Stefan (CERN)

**Session Classification:** Higgs

Contribution ID: 34

Type: **not specified**

## **ILC h -> gamma gamma**

*Sunday, 30 June 2013 15:30 (12 minutes)*

**Presenter:** Mr CALANCHA-PAREDES, Constantino (CIEMAT)

**Session Classification:** Higgs

Contribution ID: 35

Type: **not specified**

## **Study of Higgs boson decays to tau pairs at the ILC and ILD**

*Sunday, 30 June 2013 15:45 (12 minutes)*

**Presenter:** KAWADA, Shin-ichi (Hiroshima University)

**Session Classification:** Higgs

Contribution ID: 36

Type: **not specified**

## **300 and 3000 fb-1 projections for 2-Higgs doublet model at the LHC**

*Sunday, 30 June 2013 16:30 (15 minutes)*

**Presenter:** Mr CHEN, Chien-Yi (Brookhaven National Laboratory)

**Session Classification:** Higgs

Contribution ID: 37

Type: **not specified**

## **Closing the wedge with 300 and 3000 fb-1 at the LHC**

*Sunday, 30 June 2013 16:50 (15 minutes)*

**Presenter:** LEWIS, Ian (Brookhaven National Laboratory)

**Session Classification:** Higgs

Contribution ID: **38**

Type: **not specified**

## **Constraint on new particle masses and couplings from Higgs measurement**

*Sunday, 30 June 2013 17:10 (15 minutes)*

**Presenter:** Dr GORI, Stefania (University of Chicago)

**Session Classification:** Higgs



Contribution ID: 39

Type: **not specified**

## **Constraints on Higgs properties and SUSY partners in the pMSSM**

*Sunday, 30 June 2013 17:30 (15 minutes)*

**Presenter:** Prof. HEWETT, JoAnne (SLAC)

**Session Classification:** Higgs

Contribution ID: 40

Type: **not specified**

## **Measurement accuracy/sensitivity from different new physics models**

*Sunday, 30 June 2013 17:50 (15 minutes)*

**Presenter:** Prof. BATTAGLIA, Marco (UCSC and LBNL)

**Session Classification:** Higgs

Contribution ID: 41

Type: **not specified**

## **e+e- summary/updates on Higgs spin and CP (remote)**

*Monday, 1 July 2013 13:30 (15 minutes)*

**Presenter:** KRUEGER, Katja

**Session Classification:** Higgs

Contribution ID: 42

Type: **not specified**

## **Theoretical perspectives on Higgs CP mixture**

*Monday, 1 July 2013 14:10 (20 minutes)*

**Presenter:** Dr ZHANG, Yue (Caltech)

**Session Classification:** Higgs

Contribution ID: 43

Type: **not specified**

## **Comparison of LHC and e+e- capabilities in Higgs CP (remote)**

*Monday, 1 July 2013 14:35 (15 minutes)*

**Presenter:** WHITBECK, Andrew (JHU)

**Session Classification:** Higgs

Contribution ID: 44

Type: **not specified**

## **CP mixture technique & expectations in $H \rightarrow \tau\tau$ and $t\bar{t}H$**

Contribution ID: 45

Type: **not specified**

**TBA**

Contribution ID: 46

Type: **not specified**

## **H -> tau tau CP mixture (remote)**

*Monday, 1 July 2013 13:50 (15 minutes)*

**Presenter:** BERGE, Stefan

**Session Classification:** Higgs



Contribution ID: 47

Type: **not specified**

## Total width measurement at ILC

*Tuesday, 2 July 2013 10:35 (12 minutes)*

**Presenter:** SAYRE, Josh (Pittsburgh)

**Session Classification:** Higgs

Contribution ID: 48

Type: **not specified**

## **BSM Higgs searches at muon collider**

*Tuesday, 2 July 2013 12:00 (12 minutes)*

**Presenter:** Prof. HANSON, Gail (UC Riverside)

**Session Classification:** Higgs

Contribution ID: 49

Type: **not specified**

## ILC

*Tuesday, 2 July 2013 10:15 (15 minutes)*

**Presenter:** BARKLOW, Tim

**Session Classification:** Higgs

Contribution ID: 50

Type: **not specified**

## **Measurement of Higgs couplings and mass in e+e- collisions at CLIC (center-of-mass energies 350 GeV - 3 TeV)**

*Tuesday, 2 July 2013 11:20 (15 minutes)*

**Presenter:** ROLOFF, Phillip (DESY)

**Session Classification:** Higgs

Contribution ID: 51

Type: **not specified**

## TLEP

*Tuesday, 2 July 2013 10:50 (25 minutes)*

**Presenter:** JANOT, Patrick (CERN)

**Session Classification:** Higgs

Contribution ID: 52

Type: **not specified**

## mu-mu collider

*Tuesday, 2 July 2013 11:40 (15 minutes)*

**Presenter:** LIU, Zhen (PITT-PACC, Department of Physics & Astronomy, University of Pittsburgh)

**Session Classification:** Higgs

Contribution ID: 53

Type: **not specified**

## **LHeC Higgs capabilities (remote)**

*Tuesday, 2 July 2013 12:15 (15 minutes)*

**Presenter:** MELLADO, Bruce (Wisconsin)

**Session Classification:** Higgs

Contribution ID: 54

Type: **not specified**

## **Higgs Coupling Measurements and BSM Sensitivity with ATLAS at the HL-LHC**

*Tuesday, 2 July 2013 14:20 (15 minutes)*

**Presenter:** FENG, Eric (ANL/Chicago)

**Session Classification:** Higgs



Contribution ID: 55

Type: **not specified**

## **CMS sensitivities of Higgs couplings**

*Tuesday, 2 July 2013 14:40 (15 minutes)*

**Presenter:** Mr DE GRUTTOLA, michele (u of florida)

**Session Classification:** Higgs

Contribution ID: 56

Type: **not specified**

# Physics potential of a linear collider in Higgs physics

*Sunday, 30 June 2013 15:10 (15 minutes)*

**Presenter:** MOORTGAT-PICK, Gudrid

**Session Classification:** Higgs

Contribution ID: 57

Type: **not specified**

## Discussions

*Tuesday, 2 July 2013 15:10 (50 minutes)*

**Session Classification:** Higgs

Contribution ID: 58

Type: **not specified**

## **Discussion - progress toward Snowmass report CP section**

*Monday, 1 July 2013 14:55 (15 minutes)*

**Session Classification:** Higgs

Contribution ID: 59

Type: **not specified**

**reserved**

Contribution ID: **60**

Type: **not specified**

## **Report on hadron collider background simulation**

*Sunday, 30 June 2013 11:50 (20 minutes)*

**Presenter:** Dr PADHI, Sanjay (University of Wisconsin-Madison)

**Session Classification:** Plenary

Contribution ID: **61**

Type: **not specified**

## **Discussion of the final report**

*Tuesday, 2 July 2013 14:00 (20 minutes)*

**Presenter:** Prof. HATAKEYAMA, Kenichi (Baylor University)

**Session Classification:** QCD

Contribution ID: 63

Type: **not specified**

## **Predictions for W-pair production at e+e- colliders**

*Tuesday, 2 July 2013 10:55 (20 minutes)*

**Presenter:** SCHWINN, Christian (Freiburg University)

**Session Classification:** Electroweak/QCD Joint



Contribution ID: **64**

Type: **not specified**

## Discussions

*Tuesday, 2 July 2013 11:55 (35 minutes)*

**Session Classification:** Electroweak/QCD Joint

Contribution ID: 65

Type: **not specified**

## **RPV SUSY and Leptoquarks**

*Sunday, 30 June 2013 14:55 (10 minutes)*

**Presenter:** Dr KAADZE, Ketii (Fermilab)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 66

Type: **not specified**

## **pMSSM scenarios in view of the LHC and Direct Dark Matter searches**

*Sunday, 30 June 2013 14:00 (15 minutes)*

**Presenter:** Prof. BATTAGLIA, Marco (UCSC and LBNL)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 67

Type: **not specified**

## **Overview on theoretical aspects related to Higgs assisted SUSY electroweak sector**

*Sunday, 30 June 2013 14:20 (10 minutes)*

**Presenter:** Prof. SU, Shufang (University of Arizona)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: **68**

Type: **not specified**

## **Joint LHC-ILC Studies: Electroweakino Scan**

*Sunday, 30 June 2013 14:35 (15 minutes)*

**Presenters:** Dr PADHI, Sanjay (University of Wisconsin-Madison); TANABE, Tomohiko

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: **69**

Type: **not specified**

## **VBF SUSY production**

*Sunday, 30 June 2013 15:10 (15 minutes)*

**Presenter:** GURROLA, Alfredo (Vanderbilt)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 70

Type: **not specified**

## **RPV in lepton + many jets**

*Sunday, 30 June 2013 15:30 (10 minutes)*

**Presenter:** HIRSCHAUER, James (Fermi National Accelerator Laboratory)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 71

Type: **not specified**

## Multijet resonances

*Sunday, 30 June 2013 15:45 (10 minutes)*

**Presenter:** DUGGAN, Dan (Rutgers)

**Session Classification:** New Particles, Forces, and Dimensions



Contribution ID: 72

Type: **not specified**

## Detector-stable particles

*Sunday, 30 June 2013 16:30 (15 minutes)*

**Presenter:** HAAS, andrew (nyu)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 73

Type: **not specified**

## Status Report on pMSSM SUSY Studies

*Sunday, 30 June 2013 16:50 (15 minutes)*

**Presenter:** Dr RIZZO, Thomas (SLAC)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 74

Type: **not specified**

## **Radiatively-driven natural SUSY**

*Sunday, 30 June 2013 17:10 (10 minutes)*

**Presenter:** Prof. BAER, Howard Baer (University of Oklahoma)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 75

Type: **not specified**

## **Non-simplified SUSY: Stau Coannihilation at LHC and ILC**

*Sunday, 30 June 2013 17:25 (20 minutes)*

**Presenter:** Dr MELZER-PELLMANN, Isabell (DESY)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 76

Type: **not specified**

## **Physics Case for the ILC Project: Perspective from Beyond the Standard Model**

*Sunday, 30 June 2013 17:50 (20 minutes)*

**Presenter:** Dr LIST, Jenny (DESY)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 77

Type: **not specified**

## **sin2theta\_eff measurement (ATLAS)**

*Sunday, 30 June 2013 14:00 (20 minutes)*

**Presenter:** CAPUTO, Regina (Mainz University)

**Session Classification:** Electroweak

Contribution ID: 78

Type: **not specified**

## Tri-boson studies

*Sunday, 30 June 2013 14:35 (15 minutes)*

**Presenter:** HSU, Shih-Chieh (University of Washington)

**Session Classification:** Electroweak

Contribution ID: 79

Type: **not specified**

## Constraints on triple gauge boson couplings

*Sunday, 30 June 2013 14:50 (20 minutes)*

**Presenter:** EBOLI, Oscar (Universidade de Sao Paulo)

**Session Classification:** Electroweak



Contribution ID: **80**

Type: **not specified**

## **Discussion of white paper on non-standard gauge couplings - moved to discussion session on Tuesday**

*Sunday, 30 June 2013 15:10 (20 minutes)*

**Presenters:** DEGRANDE, Celine (University of Illinois); EBOLI, Oscar (Universidade de Sao Paulo)

**Session Classification:** Electroweak

Contribution ID: **81**

Type: **not specified**

## **Discussion**

*Sunday, 30 June 2013 15:30 (30 minutes)*

**Session Classification:** Electroweak

Contribution ID: 82

Type: **not specified**

## Alpha\_s at an e+e- Z factory

*Tuesday, 2 July 2013 10:15 (20 minutes)*

**Presenter:** DISSERTORI, Guenther (ETH Zurich)

**Session Classification:** Electroweak/QCD Joint

Contribution ID: **83**

Type: **not specified**

## **Update on ILC measurement of MW**

*Tuesday, 2 July 2013 11:15 (20 minutes)*

**Presenter:** WILSON, Graham (University of Kansas)

**Session Classification:** Electroweak/QCD Joint

Contribution ID: **84**

Type: **not specified**

## **Sudakov zone at higher energies**

*Tuesday, 2 July 2013 10:35 (20 minutes)*

**Presenter:** MISHRA, Kalanand (Fermilab)

**Session Classification:** Electroweak/QCD Joint

Contribution ID: 85

Type: **not specified**

## **Prospects for AQGCs and EW resonances at LHC14**

*Tuesday, 2 July 2013 11:35 (20 minutes)*

**Presenter:** REUTER, Juergen

**Session Classification:** Electroweak/QCD Joint

Contribution ID: **86**

Type: **not specified**

## Searching for top squarks

*Monday, 1 July 2013 13:10 (15 minutes)*

**Presenter:** Dr SINHA, Kuver (Syracuse University)

**Session Classification:** Top Quark

Contribution ID: **87**

Type: **not specified**

## Summary of studies

*Sunday, 30 June 2013 14:00 (1 hour)*

**Presenter:** Dr MITOV, Alexander (CERN)

**Session Classification:** Top Quark



Contribution ID: **88**

Type: **not specified**

## Discussion

*Sunday, 30 June 2013 15:00 (1 hour)*

**Session Classification:** Top Quark

Contribution ID: **89**

Type: **not specified**

## Single T production

*Tuesday, 2 July 2013 11:30 (15 minutes)*

**Presenter:** Dr ANDEEN, Timothy (Columbia University)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 90

Type: **not specified**

## Paion Production of T quarks

*Tuesday, 2 July 2013 11:45 (15 minutes)*

**Presenters:** NARAIN, Meenakshi (Brown University); Ms BHATTACHARYA, Saptaparna (Brown University)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: **91**

Type: **not specified**

## Heavy B production

*Tuesday, 2 July 2013 12:00 (15 minutes)*

**Presenter:** Prof. VARNES, Erich (University of Arizona)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 92

Type: **not specified**

## Heavy Exotic Top quarks with charge 5/3

*Tuesday, 2 July 2013 12:15 (15 minutes)*

**Presenter:** AVETISYAN, Aram (Boston University)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 93

Type: **not specified**

## **Peccei-Quinn symmetry limit in SUSY and exotic Higgs decays**

**Presenter:** Dr LIU, Tao (Department of Physics, UC@Santa Barbara)

Contribution ID: 94

Type: **not specified**

## **Physics case for a LC based on LHC results and expectations**

*Sunday, 30 June 2013 16:30 (20 minutes)*

**Presenter:** MOORTGAAT-PICK, Gudrid (DESY)

**Session Classification:** Electroweak

Contribution ID: 95

Type: **not specified**

## **Electroweak measurements at TLEP**

*Sunday, 30 June 2013 17:00 (20 minutes)*

**Presenter:** BLONDEL, Alain (DPNC Université de Genève)

**Session Classification:** Electroweak



Contribution ID: 96

Type: **not specified**

# Precision electroweak physics in $e^+e^-$ collisions at CLIC

*Sunday, 30 June 2013 17:20 (20 minutes)*

**Presenter:** ROLOFF, Philipp (CERN)

**Session Classification:** Electroweak

Contribution ID: 97

Type: **not specified**

## Discussion

*Sunday, 30 June 2013 17:40 (30 minutes)*

**Session Classification:** Electroweak

Contribution ID: **98**

Type: **not specified**

## **Electroweak precision observables in the pMSSM**

*Monday, 1 July 2013 13:30 (20 minutes)*

**Presenter:** Dr HEINEMEYER, Sven (IFCA (CSIC, Santander))

**Session Classification:** Electroweak

Contribution ID: 99

Type: **not specified**

## **Status of and prospects for predictions of MW and $\sin^2\theta_{\text{eff}}$**

*Monday, 1 July 2013 13:50 (20 minutes)*

**Presenter:** FREITAS, Ayres (University of Pittsburgh)

**Session Classification:** Electroweak

Contribution ID: **100**

Type: **not specified**

## Exploring Quantum Physics at the ILC

*Monday, 1 July 2013 14:10 (20 minutes)*

**Presenter:** Dr HEINEMEYER, Sven (IFCA (CSIC, Santander))

**Session Classification:** Electroweak

Contribution ID: **101**

Type: **not specified**

## Discussion

*Monday, 1 July 2013 14:30 (30 minutes)*

**Session Classification:** Electroweak

Contribution ID: **102**

Type: **not specified**

## **Discussion of final report**

*Tuesday, 2 July 2013 14:00 (2 hours)*

**Session Classification:** Electroweak

Contribution ID: **103**

Type: **not specified**

## Summary of rare decays

*Sunday, 30 June 2013 17:15 (15 minutes)*

**Presenters:** Dr ZUPAN, Jure (University of Cincinnati); Dr CRAIG, Nathaniel (IAS/Rutgers University)

**Session Classification:** Top Quark



Contribution ID: **104**

Type: **not specified**

## Summary of studies

*Sunday, 30 June 2013 16:30 (45 minutes)*

**Presenters:** LOGINOV, Andrew (Fermilab); GARCIA-BELLIDO, Aran (Rochester University); Dr ADELMAN, Jahred (Yale University); BAUMGART, Matthew (Carnegie Mellon University)

**Session Classification:** Top Quark

Contribution ID: **105**

Type: **not specified**

## Discussion

*Sunday, 30 June 2013 18:00 (30 minutes)*

**Session Classification:** Top Quark

Contribution ID: **106**

Type: **not specified**

## **ILC overview**

*Monday, 1 July 2013 12:40 (30 minutes)*

**Presenter:** Dr MOORTGAT-PICK, Gudrid (DESY)

**Session Classification:** Top Quark

Contribution ID: **107**

Type: **not specified**

## **Top physics in e+e- collisions at CLIC**

*Monday, 1 July 2013 12:25 (15 minutes)*

**Presenter:** Dr REDFORD, Sophie (CERN)

**Session Classification:** Top Quark

Contribution ID: **108**

Type: **not specified**

## Summary of stop searches

*Monday, 1 July 2013 13:30 (20 minutes)*

**Presenter:** Prof. PERELSTEIN, Maxim (Cornell University)

**Session Classification:** Top Quark

Contribution ID: **109**

Type: **not specified**

## Summary of $t$ $\bar{t}$ resonances

*Monday, 1 July 2013 14:10 (20 minutes)*

**Presenter:** Prof. GOLLING, Tobias (Yale University)

**Session Classification:** Top Quark

Contribution ID: **110**

Type: **not specified**

## Summary of top partner searches

*Monday, 1 July 2013 14:50 (20 minutes)*

**Presenter:** Prof. NARAIN, Meenakshi (Brown University)

**Session Classification:** Top Quark

Contribution ID: **111**

Type: **not specified**

## Discussion

*Monday, 1 July 2013 13:50 (20 minutes)*

**Session Classification:** Top Quark



Contribution ID: 112

Type: **not specified**

## Summary of studies

*Tuesday, 2 July 2013 10:15 (1 hour)*

**Presenters:** JUNG, Andreas (Fermilab); Dr SHELTON, Jessie (Harvard University); Dr SCHULZE, Markus (Argonne National Laboratory)

**Session Classification:** Top Quark

Contribution ID: **113**

Type: **not specified**

## Discussion

*Tuesday, 2 July 2013 11:15 (1 hour)*

**Session Classification:** Top Quark

Contribution ID: **114**

Type: **not specified**

## **ILC samples**

*Tuesday, 2 July 2013 13:00 (10 minutes)*

**Presenter:** GRAF, Norman (SLAC)

**Session Classification:** Top Quark

Contribution ID: **115**

Type: **not specified**

## Discussion

*Monday, 1 July 2013 15:10 (20 minutes)*

**Session Classification:** Top Quark

Contribution ID: **116**

Type: **not specified**

## **When the Higgs meets the Top**

*Tuesday, 2 July 2013 13:25 (15 minutes)*

**Presenter:** Prof. KAO, Chung (University of Oklahoma)

**Session Classification:** Top Quark

Contribution ID: 117

Type: **not specified**

## **Study of top pair production near the threshold at ILC**

*Tuesday, 2 July 2013 13:10 (15 minutes)*

**Presenter:** Dr HORIGUCHI, Tomohiro (Tohoku University)

**Session Classification:** Top Quark

Contribution ID: **118**

Type: **not specified**

## Summary of studies

*Tuesday, 2 July 2013 14:00 (1 hour)*

**Presenters:** Dr TWEEDIE, Brock (Boston University); Dr DOLEN, James (University at Buffalo); PILOT, Justin (University of California, Davis); Dr POESCHL, Roman (CNRS/LAL); CHEKANOV, Sergei (ANL)

**Session Classification:** Top Quark

Contribution ID: **119**

Type: **not specified**

## Discussion

*Tuesday, 2 July 2013 15:00 (1 hour)*

**Session Classification:** Top Quark



Contribution ID: **120**

Type: **not specified**

## **The ILC MC Data Samples**

*Sunday, 30 June 2013 16:50 (10 minutes)*

**Presenter:** GRAF, Norman (SLAC)

**Session Classification:** Electroweak

Contribution ID: 121

Type: **not specified**

## **ATLAS sensitivities of H/A- $\rightarrow$ mumu search (remote)**

**Presenter:** POLLARD, Chris (Duke University)

Contribution ID: 122

Type: **not specified**

## Little Higgs with T-Parity

*Tuesday, 2 July 2013 14:20 (15 minutes)*

**Presenter:** REUTER, Juergen (DESY)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 123

Type: **not specified**

## **BSM Higgs at ILC**

*Tuesday, 2 July 2013 15:35 (25 minutes)*

**Presenter:** Prof. HABER, Howard (University of California, Santa Cruz)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 124

Type: **not specified**

## 2 Higgs Doublet Models at LHC

*Tuesday, 2 July 2013 15:10 (25 minutes)*

**Presenter:** NARAIN, Meenakshi (Brown University)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 125

Type: **not specified**

## Exotic Higgs Decays: Overview

*Tuesday, 2 July 2013 14:35 (20 minutes)*

**Presenter:** Dr LIU, Tao (Department of Physics, UC@Santa Barbara)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 126

Type: **not specified**

## Exotic Higgs decays: NMSSM Study

*Tuesday, 2 July 2013 14:55 (15 minutes)*

**Presenter:** POTTER, Chris

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 128

Type: **not specified**

## **ATLAS sensitivities of H/A->mumu (remote)**

*Monday, 1 July 2013 15:15 (15 minutes)*

**Presenter:** POLLARD, Chris (Duke University)

**Session Classification:** Higgs



Contribution ID: **129**

Type: **not specified**

## **Summary report from the Les Houches workshop**

*Monday, 1 July 2013 13:30 (30 minutes)*

**Presenter:** Prof. HUSTON, Joey (Michigan State University)

**Session Classification:** QCD

Contribution ID: 130

Type: **not specified**

## **Cross sections at 14, 33, and 100 TeV pp colliders**

*Monday, 1 July 2013 14:00 (30 minutes)*

**Presenter:** CAMPBELL, John (Fermilab)

**Session Classification:** QCD

Contribution ID: 131

Type: **not specified**

## **Monojet Dark Matter Searches**

*Tuesday, 2 July 2013 14:00 (10 minutes)*

**Presenter:** Prof. WHITESON, Daniel (UC Irvine)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 132

Type: **not specified**

## Dark Matter searches with heavy quarks

*Tuesday, 2 July 2013 14:10 (10 minutes)*

**Presenter:** Dr PENNING, Bjoern (Fermilab/UChicago)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: **133**

Type: **not specified**

## **Discussion**

*Sunday, 30 June 2013 18:10 (20 minutes)*

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 134

Type: **not specified**

## **VBS (ZZjj,WZjj) studies**

*Sunday, 30 June 2013 14:20 (15 minutes)*

**Presenter:** LI, Shu (Duke University)

**Session Classification:** Electroweak

Contribution ID: 135

Type: **not specified**

## Rjets study status

*Monday, 1 July 2013 14:30 (20 minutes)*

**Presenter:** BEAUCHEMIN, Hugo

**Session Classification:** QCD

Contribution ID: 136

Type: **not specified**

## Heavy lepton searches

*Tuesday, 2 July 2013 10:15 (20 minutes)*

**Presenter:** Dr DE LORENZI, Francesco (Iowa State University)

**Session Classification:** Flavor & CP



Contribution ID: 137

Type: **not specified**

## future of Fermilab

*Monday, 1 July 2013 12:00 (15 minutes)*

**Presenter:** LOCKYER, Nigel (TRIUMF / Fermilab)

**Session Classification:** Plenary

Contribution ID: **138**

Type: **not specified**

## **New technique for top mass**

*Sunday, 30 June 2013 17:40 (15 minutes)*

**Presenter:** Dr ALIOLI, Simone (LBNL & UC Berkeley)

**Session Classification:** Top Quark

Contribution ID: **139**

Type: **not specified**

## **RS Studies**

*Tuesday, 2 July 2013 10:15 (15 minutes)*

**Presenter:** Prof. LEE, Seung J. (KAIST)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 140

Type: **not specified**

## RS Flavor Benchmark

*Tuesday, 2 July 2013 10:55 (15 minutes)*

**Presenter:** AGASHE, Kaustubh

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: **141**

Type: **not specified**

## **Dijet Resonances**

*Tuesday, 2 July 2013 11:10 (15 minutes)*

**Presenter:** Dr YU, Felix (Fermilab)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: **142**

Type: **not specified**

## **Z Prime**

*Tuesday, 2 July 2013 10:30 (15 minutes)*

**Presenter:** LIU, Zhen (PITT-PACC, Department of Physics & Astronomy, University of Pittsburgh)

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: **143**

Type: **not specified**

## **Z Prime**

*Tuesday, 2 July 2013 10:45 (10 minutes)*

**Presenter:** HAYDEN, Daniel

**Session Classification:** New Particles, Forces, and Dimensions

Contribution ID: 144

Type: **not specified**

## Directions in Energy Frontier

*Monday, 1 July 2013 18:00 (20 minutes)*

**Session Classification:** Computing



Contribution ID: 145

Type: **not specified**

## Discussion

*Monday, 1 July 2013 14:30 (20 minutes)*

**Session Classification:** Top Quark

Contribution ID: 146

Type: **not specified**

## **Snowmass Young Overview & Physics**

*Monday, 1 July 2013 18:00 (20 minutes)*

**Presenter:** Dr PENNING, Bjoern (Fermilab/UChicago)

**Session Classification:** Snowmass Young

Contribution ID: **147**

Type: **not specified**

## **Discussion**

*Monday, 1 July 2013 18:20 (1 hour)*

**Session Classification:** Snowmass Young

Contribution ID: **148**

Type: **not specified**

## **ZH with H->inv**

*Tuesday, 2 July 2013 15:00 (10 minutes)*

**Presenter:** OKAWA, Hideki (Brookhaven National Laboratory)

**Session Classification:** Higgs

Contribution ID: 149

Type: **not specified**

## **alpha\_s from hadronic width of W and Z at TLEP**

*Tuesday, 2 July 2013 14:20 (20 minutes)*

**Presenters:** BLONDEL, Alain (DPNC Université de Genève); Dr JANOT, Patrick (CERN Geneva, Switzerland)

**Session Classification:** QCD