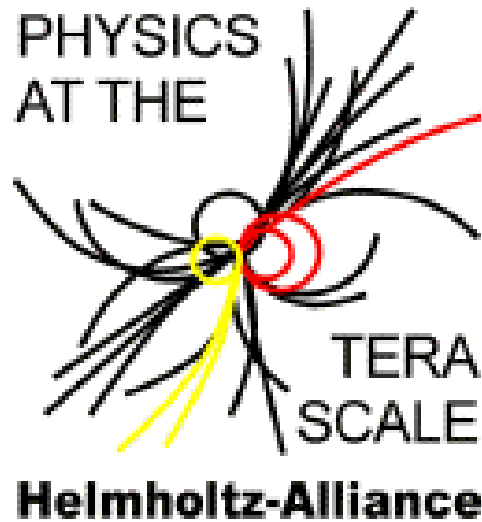


# 'Physics at the Terascale' Kick-off Workshop



## Report of Contributions

Contribution ID: 0

Type: **not specified**

## Opening

*Monday, 3 December 2007 13:00 (40 minutes)*

**Primary author:** Prof. MAETTIG, Peter (Bergische Universität Wuppertal)

**Co-author:** Dr HEUER, Rolf-Dieter

**Presenters:** Dr WAGNER, Albrecht; Dr NICOLAY, Rainer; Dr HEUER, Rolf-Dieter

**Session Classification:** Plenary Session

Contribution ID: 1

Type: **not specified**

## **SUSY at LHC (theory)**

*Monday, 3 December 2007 13:40 (30 minutes)*

**Primary author:** Dr HINCHCLIFFE, Ian

**Presenter:** Dr HINCHCLIFFE, Ian

**Session Classification:** Plenary Session

Contribution ID: 2

Type: **not specified**

## **SUSY at LHC (experiment)**

*Monday, 3 December 2007 14:10 (30 minutes)*

**Primary author:** Dr POLESELLO, Giacomo

**Presenter:** Dr POLESELLO, Giacomo

**Session Classification:** Plenary Session

Contribution ID: 4

Type: **not specified**

## **Detector Development (ILC)**

*Wednesday, 5 December 2007 13:50 (30 minutes)*

**Primary author:** Dr BRAU, Jim

**Presenter:** Dr BRAU, Jim

**Session Classification:** Plenary Session

Contribution ID: 5

Type: **not specified**

## **LHC status report**

*Monday, 3 December 2007 17:20 (40 minutes)*

**Primary author:** Dr BAILEY, Roger

**Presenter:** Dr BAILEY, Roger

**Session Classification:** Plenary Session

Contribution ID: 6

Type: **not specified**

## **QCD at LHC (theory)**

*Monday, 3 December 2007 16:00 (30 minutes)*

**Primary author:** Dr GLOVER, Nigel

**Presenter:** Dr GLOVER, Nigel

**Session Classification:** Plenary Session

Contribution ID: 7

Type: **not specified**

## **QCD at LHC (experiment)**

*Monday, 3 December 2007 16:30 (30 minutes)*

**Primary author:** Dr LECOMPTE, Tom

**Presenter:** Dr LECOMPTE, Tom

**Session Classification:** Plenary Session



Contribution ID: **8**

Type: **not specified**

## **Monte Carlo Simulations (1)**

*Monday, 3 December 2007 15:30 (30 minutes)*

**Primary author:** Dr SJOSTRAND, Torbjorn

**Presenter:** Dr SJOSTRAND, Torbjorn

**Session Classification:** Plenary Session

Contribution ID: 9

Type: **not specified**

## **Detector development (SLHC)**

*Monday, 3 December 2007 18:00 (30 minutes)*

**Primary author:** Dr STAPNES, Steinar

**Presenter:** Dr STAPNES, Steinar

**Session Classification:** Plenary Session

Contribution ID: **10**

Type: **not specified**

## **Electroweak at LHC (theory)**

*Monday, 3 December 2007 18:30 (30 minutes)*

**Primary author:** Dr DENNER, Ansgar

**Presenter:** Dr DENNER, Ansgar

**Session Classification:** Plenary Session

Contribution ID: 11

Type: **not specified**

## **Electroweak at LHC (experiment)**

*Monday, 3 December 2007 19:00 (30 minutes)*

**Primary author:** Dr ROLANDI, Gigi

**Presenter:** Dr ROLANDI, Gigi

**Session Classification:** Plenary Session

Contribution ID: 12

Type: **not specified**

## **Introduction to the Helmholtz Alliance**

*Tuesday, 4 December 2007 08:30 (20 minutes)*

**Presenter:** BROCK, Ian (University of Bonn)

**Session Classification:** Plenary Session

Contribution ID: 13

Type: **not specified**

## **The Analysis Centre in the Alliance**

*Tuesday, 4 December 2007 08:50 (35 minutes)*

**Presenter:** MOENIG, Klaus (DESY)

**Session Classification:** Plenary Session

Contribution ID: 14

Type: **not specified**

## **The Analysis Network in the Alliance**

*Tuesday, 4 December 2007 09:25 (20 minutes)*

**Presenter:** Dr KRAEMER, Michael

**Session Classification:** Plenary Session

Contribution ID: 15

Type: **not specified**

## **Grid Computing and the National Analysis Facility (NAF)**

*Tuesday, 4 December 2007 09:45 (30 minutes)*

**Presenter:** Dr GUELZOW, Volker

**Session Classification:** Plenary Session



Contribution ID: 17

Type: **not specified**

## **Grid Computing**

*Tuesday, 4 December 2007 11:15 (30 minutes)*

**Primary author:** Dr KNOBLOCH, Juergen

**Presenter:** Dr KNOBLOCH, Juergen

**Session Classification:** Plenary Session

Contribution ID: **18**

Type: **not specified**

## **Top at LHC (theory)**

*Wednesday, 5 December 2007 09:00 (30 minutes)*

**Primary author:** Dr LAENEN, Eric

**Presenter:** Dr LAENEN, Eric

**Session Classification:** Plenary Session

Contribution ID: **19**

Type: **not specified**

## **Top at LHC (experiment)**

*Wednesday, 5 December 2007 09:30 (30 minutes)*

**Primary author:** Dr INCANDELA, Joe

**Presenter:** Dr INCANDELA, Joe

**Session Classification:** Plenary Session

Contribution ID: **20**

Type: **not specified**

## **Monte Carlo Simulations (2)**

*Wednesday, 5 December 2007 10:00 (30 minutes)*

**Primary author:** Dr RICHARDSON, Peter

**Presenter:** Dr RICHARDSON, Peter

**Session Classification:** Plenary Session

Contribution ID: 21

Type: **not specified**

## HERA and the LHC

*Wednesday, 5 December 2007 11:00 (30 minutes)*

**Primary author:** Dr DEROECK, Albert

**Presenter:** Dr DEROECK, Albert

**Session Classification:** Plenary Session

Contribution ID: 22

Type: **not specified**

## Exotics

*Wednesday, 5 December 2007 11:30 (30 minutes)*

**Primary author:** Dr HEWETT, JoAnne

**Presenter:** Dr HEWETT, JoAnne

**Session Classification:** Plenary Session

Contribution ID: 23

Type: **not specified**

## ILC Collider Project

*Wednesday, 5 December 2007 13:10 (40 minutes)*

**Primary author:** Dr FOSTER, Brian

**Presenter:** Dr FOSTER, Brian

**Session Classification:** Plenary Session

Contribution ID: 24

Type: **not specified**

## **Higgs at LHC (theory and experiment)**

*Wednesday, 5 December 2007 14:20 (40 minutes)*

**Primary author:** Dr DAWSON, Sally

**Presenter:** Dr DAWSON, Sally

**Session Classification:** Plenary Session



Contribution ID: 25

Type: **not specified**

## Physics Highlights at the ILC

*Monday, 3 December 2007 14:40 (30 minutes)*

**Primary author:** Dr FREY, Ariane

**Presenter:** Dr FREY, Ariane

**Session Classification:** Plenary Session

Contribution ID: 26

Type: **not specified**

## Closing remarks

*Wednesday, 5 December 2007 15:00 (10 minutes)*

**Primary authors:** Prof. MAETTIG, Peter (Bergische Universität Wuppertal); Dr HEUER, Rolf-Dieter

**Presenters:** Prof. MAETTIG, Peter (Bergische Universität Wuppertal); Dr HEUER, Rolf-Dieter

**Session Classification:** Plenary Session

Contribution ID: 27

Type: **not specified**

# The Virtual Laboratory for Detector Technology

*Tuesday, 4 December 2007 10:30 (30 minutes)*

**Presenter:** Dr FREY, Ariane

**Session Classification:** Plenary Session

Contribution ID: 28

Type: **not specified**

## Accelerator Physics in the Alliance

*Tuesday, 4 December 2007 11:00 (15 minutes)*

**Presenter:** Dr ELSEN, Eckhard (DESY)

**Session Classification:** Plenary Session

Contribution ID: 29

Type: **not specified**

## **$t\bar{t}$ + jet in NLO QCD, tbc**

**Presenter:** Dr WEINZIERL, Stefan (Univ. Mainz)

Contribution ID: **30**

Type: **not specified**

## **WW + jet in NLO QCD, tbc**

**Presenter:** NN

Contribution ID: **31**

Type: **not specified**

## **Production and properties of Z to mu mu with ATLAS**

*Tuesday, 4 December 2007 13:05 (25 minutes)*

**Presenter:** SCHOTT, Matthias (Ludwig-Maximilians-Universitaet Muenchen)

**Session Classification:** LHC-D parallel session: EW/QCD

Contribution ID: 32

Type: **not specified**

## **Forward-backward charge asymmetry with $Z \rightarrow ee$ with ATLAS**

*Tuesday, 4 December 2007 13:30 (25 minutes)*

**Presenter:** AHARROUCHE, Mohamed (Johannes-Gutenberg-Universitaet Mainz)

**Session Classification:** LHC-D parallel session: EW/QCD



Contribution ID: 33

Type: **not specified**

## Calibration with Z + jet

*Tuesday, 4 December 2007 13:55 (25 minutes)*

**Presenter:** BUEGE, Volker (IEKP, University of Karlsruhe)

**Session Classification:** LHC-D parallel session: EW/QCD

Contribution ID: **34**

Type: **not specified**

## **ZCH 1, tbc**

Contribution ID: 35

Type: **not specified**

## **Gauge Boson plus Jet Production at large $p_T$**

*Tuesday, 4 December 2007 12:40 (25 minutes)*

**Presenter:** SCHULZE, Markus (TTP, University of Karlsruhe)

**Session Classification:** LHC-D parallel session: EW/QCD

Contribution ID: **36**

Type: **not specified**

## **SM Fits using Gfitter**

*Tuesday, 4 December 2007 14:20 (25 minutes)*

**Presenter:** MARTIN, Goebel (Universität Hamburg)

**Session Classification:** LHC-D parallel session: EW/QCD

Contribution ID: 37

Type: **not specified**

## **Narrow-width approximation for BSM physics: limitations and improvements**

*Tuesday, 4 December 2007 12:40 (15 minutes)*

**Presenter:** Dr KAUER, Nikolas (Universita"t Wu"rzburg)

**Session Classification:** LHC-D parallel session: BSM

Contribution ID: **38**

Type: **not specified**

## **Mini Black Holes in ATLAS**

*Tuesday, 4 December 2007 12:55 (15 minutes)*

**Presenter:** LENDERMANN, Victor (Heidelberg)

**Session Classification:** LHC-D parallel session: BSM

Contribution ID: 39

Type: **not specified**

## **LFV tau decays at the LHC**

*Tuesday, 4 December 2007 13:10 (15 minutes)*

**Presenter:** O'LEARY, Ben (Aachen)

**Session Classification:** LHC-D parallel session: BSM

Contribution ID: 40

Type: **not specified**

## **Electroweak contributions to squark production**

*Tuesday, 4 December 2007 13:25 (15 minutes)*

**Presenter:** KIM, Jong Soo (Bonn)

**Session Classification:** LHC-D parallel session: BSM



Contribution ID: 41

Type: **not specified**

## **Electroweak NLO Contributions to Top-Squark Pair Production at the LHC**

*Tuesday, 4 December 2007 13:40 (15 minutes)*

**Presenter:** TRENKEL, Maike (MPI Muenchen)

**Session Classification:** LHC-D parallel session: BSM

Contribution ID: 42

Type: **not specified**

## **SUSY searches at CMS in the fully hadronic channel**

*Tuesday, 4 December 2007 14:10 (15 minutes)*

**Presenter:** Dr SANDER, Christian (University of Hamburg)

**Session Classification:** LHC-D parallel session: BSM

Contribution ID: 43

Type: **not specified**

## **Inclusive susy searches at ATLAS**

**Presenter:** Dr CARON, Sascha (Uni Freiburg)

Contribution ID: 44

Type: **not specified**

## **Data driven estimation of SUSY backgrounds**

*Tuesday, 4 December 2007 14:25 (15 minutes)*

**Presenter:** ZHURAVLOV, Vadym (MPI Munich)

**Session Classification:** LHC-D parallel session: BSM

Contribution ID: 45

Type: **not specified**

## **Searches for SUSY and Beyond using leptons in CMS**

*Tuesday, 4 December 2007 14:40 (15 minutes)*

**Presenter:** TEYSSIER, Daniel (Aachen)

**Session Classification:** LHC-D parallel session: BSM

Contribution ID: 46

Type: **not specified**

## Search for SUSY with ATLAS

*Tuesday, 4 December 2007 14:55 (15 minutes)*

**Presenter:** KUMMER, Christian

**Session Classification:** LHC-D parallel session: BSM

Contribution ID: 47

Type: **not specified**

## **Constraints on the Lightest Neutralino Mass**

*Tuesday, 4 December 2007 15:30 (15 minutes)*

**Presenter:** KITTEL, Olaf (Bonn)

**Session Classification:** LHC-D parallel session: BSM

Contribution ID: 48

Type: **not specified**

## **Neutralino Mass Measurement in Dilepton Final States at CMS**

*Tuesday, 4 December 2007 15:45 (15 minutes)*

**Presenter:** MOHR, Niklas (RWTH Aachen)

**Session Classification:** LHC-D parallel session: BSM



Contribution ID: 49

Type: **not specified**

## **SUSY in tau-lepton final states**

*Tuesday, 4 December 2007 16:00 (15 minutes)*

**Presenter:** WIENEMANN, Peter (University of Bonn)

**Session Classification:** LHC-D parallel session: BSM

Contribution ID: 50

Type: **not specified**

## Update on SFitter

*Tuesday, 4 December 2007 16:15 (15 minutes)*

**Presenter:** ZERWAS, Dirk (Orsay)

**Session Classification:** LHC-D parallel session: BSM

Contribution ID: **51**

Type: **not specified**

## **Discussion**

*Tuesday, 4 December 2007 16:30 (30 minutes)*

**Session Classification:** LHC-D parallel session: BSM

Contribution ID: 52

Type: **not specified**

## End-User Analysis with Proof

*Tuesday, 4 December 2007 13:00 (30 minutes)*

**Primary author:** Dr MALZACHER, Peter (GSI Darmstadt)

**Co-author:** Dr SCHWARZ, Kilian

**Presenter:** Dr MALZACHER, Peter (GSI Darmstadt)

**Session Classification:** Parallel session: Grid and Analysis Facilities

Contribution ID: 53

Type: **not specified**

## Physics Tools in ATLAS

*Tuesday, 4 December 2007 13:30 (20 minutes)*

**Primary author:** ELMSHEUSER, Johannes

**Presenter:** ELMSHEUSER, Johannes

**Session Classification:** Parallel session: Grid and Analysis Facilities

Contribution ID: 54

Type: **not specified**

## **End-user requirements for physics analysis**

*Tuesday, 4 December 2007 14:00 (30 minutes)*

**Primary author:** Dr EHRENFELD, Wolfgang

**Presenter:** Dr EHRENFELD, Wolfgang

**Session Classification:** Parallel session: Grid and Analysis Facilities

Contribution ID: 55

Type: **not specified**

## Technical Concept of the DESY NAF

*Tuesday, 4 December 2007 14:30 (30 minutes)*

**Primary author:** Dr KEMP, Yves

**Presenter:** Dr KEMP, Yves

**Session Classification:** Parallel session: Grid and Analysis Facilities

Contribution ID: 56

Type: **not specified**

## **Discussion of DESY NAF concept**

*Tuesday, 4 December 2007 15:30 (1 hour)*

**Session Classification:** Parallel session: Grid and Analysis Facilities



Contribution ID: 57

Type: **not specified**

## **Cross-section for top quark production at LHC**

*Tuesday, 4 December 2007 12:40 (15 minutes)*

theo

**Presenter:** MOCH, Sven-Olaf

**Session Classification:** LHC-D parallel session: Top

Contribution ID: 58

Type: **not specified**

## W helicity in NNLO

*Tuesday, 4 December 2007 13:00 (15 minutes)*

theo

**Presenter:** KOERNER, Juergen

**Session Classification:** LHC-D parallel session: Top

Contribution ID: 59

Type: **not specified**

## **NLO corrections to top pair production + jet**

*Tuesday, 4 December 2007 13:20 (15 minutes)*

theo

**Presenter:** Dr WEINZIERL, Stefan (Univ. Mainz)

**Session Classification:** LHC-D parallel session: Top

Contribution ID: **60**

Type: **not specified**

## **tt-bar mass at CMS**

*Tuesday, 4 December 2007 13:40 (15 minutes)*

CMS, Aachen

**Presenter:** STEGGEMANN, Jan

**Session Classification:** LHC-D parallel session: Top

Contribution ID: **61**

Type: **not specified**

## Top quark activities

*Tuesday, 4 December 2007 14:00 (15 minutes)*

Atlas, Bonn

**Presenter:** CRISTINZIANI, Markus (Uni Bonn)

**Session Classification:** LHC-D parallel session: Top

Contribution ID: **62**

Type: **not specified**

## **Single Top Search at CMS**

*Tuesday, 4 December 2007 14:20 (15 minutes)*

CMS, Karlsruhe

**Presenter:** WEINELT, Julia

**Session Classification:** LHC-D parallel session: Top

Contribution ID: **63**

Type: **not specified**

## Top Mass Reconstruction

theo

**Presenter:** N.N.

Contribution ID: **64**

Type: **not specified**

## **Top Mass studies in Goettingen**

*Tuesday, 4 December 2007 15:50 (15 minutes)*

Atlas, Goettingen

**Presenter:** KROENINGER, Kevin

**Session Classification:** LHC-D parallel session: Top



Contribution ID: 65

Type: **not specified**

## Top quark activities in RWTH III B

*Tuesday, 4 December 2007 15:30 (15 minutes)*

CMS, Aachen

**Presenter:** KALININ, Sergey

**Session Classification:** LHC-D parallel session: Top

Contribution ID: 66

Type: **not specified**

## **The Decay Length Method For Top Quark Mass Measurement**

*Tuesday, 4 December 2007 16:10 (15 minutes)*

Atlas, Dortmund

**Presenter:** WALBERSLOH, Joerg

**Session Classification:** LHC-D parallel session: Top

Contribution ID: 67

Type: **not specified**

## Discussion on Working groups

*Tuesday, 4 December 2007 16:30 (30 minutes)*

**Session Classification:** LHC-D parallel session: Top

Contribution ID: **68**

Type: **not specified**

## **A HepMC ROOT file format for MC Generators**

*Tuesday, 4 December 2007 14:45 (25 minutes)*

**Presenter:** OBERST, Oliver (IEKP, Uni Karlsruhe)

**Session Classification:** LHC-D parallel session: EW/QCD

Contribution ID: 69

Type: **not specified**

## **A parton shower algorithm based on the dipole formalism**

*Tuesday, 4 December 2007 15:30 (25 minutes)*

**Presenter:** WEINZIERL, Stefan (Uni Mainz)

**Session Classification:** LHC-D parallel session: EW/QCD

Contribution ID: 70

Type: **not specified**

## Discussion on future development

*Tuesday, 4 December 2007 16:20 (25 minutes)*

**Presenters:** KÜHN, Johann (TTP, Uni Karlsruhe); RABBERTZ, Klaus (IEKP, Uni Karlsruhe); DITTMAYER, Stefan (MPI Physik, München); TAPPROGGE, Stefan (Uni Mainz); GEHRMANN, Thomas (Uni Zürich)

**Session Classification:** LHC-D parallel session: EW/QCD

Contribution ID: 71

Type: **not specified**

## **Big Questions in Particle Physics and Cosmology**

*Tuesday, 4 December 2007 17:00 (1 hour)*

**Primary author:** Dr ELLIS, John

**Presenter:** Dr ELLIS, John

**Session Classification:** DESY Seminar

Contribution ID: 72

Type: **not specified**

## **SUSY QCD corrections to squark loops in Higgs boson production via gluon gluon fusion**

*Tuesday, 4 December 2007 13:55 (15 minutes)*

**Presenter:** MUEHLLEITNER, Margarete (CERN)

**Session Classification:** LHC-D parallel session: BSM



Contribution ID: 73

Type: **not specified**

## Top Trigger studies at ATLAS

*Tuesday, 4 December 2007 14:40 (15 minutes)*

Atlas, DESY

**Presenter:** BARISONZI, Marcello

**Session Classification:** LHC-D parallel session: Top

Contribution ID: 74

Type: **not specified**

## QCD in NNLO

*Tuesday, 4 December 2007 15:55 (25 minutes)*

**Presenter:** GLOVER, Nigel (University of Durham)

**Session Classification:** LHC-D parallel session: EW/QCD

Contribution ID: 75

Type: **not specified**

## Open Access Publishing

*Wednesday, 5 December 2007 13:00 (10 minutes)*

**Primary author:** VOSS, Ruediger

**Presenter:** VOSS, Ruediger

**Session Classification:** Plenary Session