

6th Annual Workshop of the Helmholtz Alliance "Physics at the Terascale"

Monday 03 December 2012

Registration - Foyer Building 5 (12:00-13:00)

Opening Session - Auditorium Building 5 (13:00-13:20)

time	title	presenter
13:00	Introduction	MNICH, Joachim
13:15	Workshop Matters	

Higgs Symposium - Auditorium Building 5 (13:20-15:20)

- **Conveners: Weiglein, Georg; Prof. Harlander, Robert**

time	title	presenter
13:20	The recent observation at the LHC from a historical perspective: The story of the Higgs	BORRELLI, Arianna
14:00	Higgs - Experimental Status and Perspectives	TACKMANN, Kerstin
14:40	The Quest for the Higgs Boson a Theory Perspective	Prof. DITTMAYER, Stefan

photo session - (15:20-15:30)

BSM Physics Parallel Session I - SR 3 (16:00-18:00)

- **Conveners: Mr. Dreiner, Herbert; Sander, Christian; Prof. Krämer, Michael; Dr. Ehrenfeld, Wolfgang; Dr. Ellinghaus, Frank**

time	title	presenter
16:00	Search for new phenomena in dijet mass and angular distributions at ATLAS	ENDNER, Oliver
16:15	Effective Models for Dark Matter at the International Linear Collider	SCHMEIER, Daniel
16:30	Search for new physics with muons + X at CMS	CAUDRON, Julien
16:45	Towards gauge coupling unification in minimal SU(5) at 3-loop accuracy	Dr. DI LUZIO, Luca
17:00	Search for 4th generation quarks with same-sign dilepton events at ATLAS	Mr. WENDLAND, Dennis
17:15	How alive is constrained Supersymmetry really after the discovery of a Higgs-like particle	Mr. PRUDENT, Xavier
17:30	Searches for direct supersymmetric gaugino and slepton pair production in final states with leptons with the ATLAS detector	Dr. DIETRICH, Janet
17:45	How low can SUSY go? Monojets, matching and compressed spectra.	Mr. TATTERSALL, Jamie

EW and QCD Physics - Parallel Session I - BAH SR2 (16:00-18:00)

- **Conveners: Heinrich, Gudrun; Dr. Schumann, Steffen; Pozzorini, Stefano; Lohwasser, Kristin; Rabbertz, Klaus**

time	title	presenter
16:00	Simplicity in exclusive multi-jets	GERWICK, Erik
16:17	Production of Z+jets at ATLAS	BIERWAGEN, Katharina
16:34	Multi-jet cross section at NLO accuracy in QCD with NJet	BIEDERMANN, Benedikt
16:51	Measurement of the 3-jet mass cross section at 7 TeV	Mr. STOBER, Fred
17:08	Determination of the strong coupling from 3-jet rates at the TeV scale	RABBERTZ, Klaus
17:25	Parton distribution functions and precision predictions for cross sections at the LHC	MOCH, Sven-Olaf
17:42	Sensitivity of PDFs and α_s to CMS Inclusive Jets 2010	SIEBER, G.

LC Forum - SR 1 (16:00-18:00)

- **Conveners: Prof. Moortgat-Pick, Gudrid; Dr. Simon, Frank; Riemann, Sabine; Prof. Fleck, Ivor**

time	title	presenter
16:00	Top and Higgs measurements	Mr. POESCHL, Roman
16:30	Top mass measurements	Dr. SIMON, Frank
16:50	Strong field effects on physics processes at the IP	PORTO, Stefano Dr. HARTIN, Anthony
17:02	Large Prototypes and Small Pixels: German R for a TPC at a Linear Collider	DIENER, Ralf
17:17	Calo	KRUEGER, Katja
17:37	ILC Machine: Scenarios for a Higgs Factory	Dr. LIST, Benno

LHC Higgs - SR 4a (16:00-18:00)

- **Conveners: Prof. Quast, Günter; Prof. Harlander, Robert; Kroseberg, Juergen**

time	title	presenter
16:00	Welcome	KROSEBERG, Juergen Prof. QUAST, Günter Prof. HARLANDER, Robert
16:10	SM H->tautau search with ATLAS	Mr. SCHWINDT, Thomas
16:35	SM H->tautau search with CMS (emphasis mumu channel)	Ms. BETHANI, Agni
16:55	Search for associated WH production via H->tau_h tau_h with CMS	Mr. BURGMEIER, Armin
17:10	SM H->WW in VBF with ATLAS and CMS	HSU, Pai-Hsien
17:35	SM H->ZZ with ATLAS	GOBLIRSCH-KOLB, Maximilian

Top Physics Parallel Session I - SR 4b (16:00-18:00)

- **Conveners: Dr. Kroeninger, Kevin; Prof. Uwer, Peter; Bernreuther, Werner; Prof. Schilling, Frank**

time	title	presenter
16:00	Top Quark: pair spectrum, cross section & coupling	KOMM, Matthias
16:20	Measurement of differential top-quark pair production cross sections in pp collisions at $\sqrt{s} = 7$ TeV with CMS	Mr. LANGE, Joern

16:35	Differential cross sections in dileptons at 8 TeV	ASIN, Ivan
16:50	Measurement of jet multiplicity in $t\bar{t}$ events in ATLAS	Dr. GRAHN, Karl-Johan
17:05	Jet multiplicity distributions in dileptons at 7 TeV	DORLAND, Tyler
17:20	Measurement of the Jet Multiplicity in Top Quark Pair Events in Semi-Leptonic Decay Channel at CMS	Mr. DESCROIX, Alexis
17:40	Four top final states with NLO accuracy in perturbative QCD	Dr. WOREK, Malgorzata

Reception and Poster Session - Canteen Building 9/9a (18:00-20:00)

Tuesday 04 December 2012

BSM Physics Parallel Session II - SR 3 (09:00-10:30)

- **Conveners: Mr. Dreiner, Herbert; Sander, Christian; Prof. Krämer, Michael; Dr. Ehrenfeld, Wolfgang; Dr. Ellinghaus, Frank**

time	title	presenter
09:00	Search for supersymmetry in single lepton + b-jets and opposite-sign dilepton final states at CMS	Mr. PIETSCH, Niklas
09:15	Phenomenologie of gluino-pair-production at the LHC at NNLL accuracy	Dr. PFOH, Torsten
09:30	Search for squarks and gluinos using final states with jets and missing transverse momentum with the ATLAS detector	RAMMENSEE, Michael Christian
09:45	Soft-gluon resummation for squark- and gluino hadroproduction	THEWES, Silja Christine
10:00	SUSY searches with one or two photons at CMS	Ms. SOLA, Valentina
10:15	Precise predictions for squark and gluino production with soft and Coulomb resummation	Dr. SCHWINN, Christian

EW and QCD Physics - Parallel Session II - SR 1 (09:00-10:30)

- **Conveners: Dr. Schumann, Steffen; Pozzorini, Stefano; Heinrich, Gudrun; Lohwasser, Kristin; Rabbertz, Klaus**

time	title	presenter
09:00	An alternative subtraction scheme for NLO calculations	Dr. ROBENS, Tania
09:18	Recursive NLO-generator for electroweak SM-amplitudes	HOFER, Lars
09:36	Analysis of Z(->mumu)+Jet Events and Jet Energy Calibration in CMS	HAITZ, Dominik
09:54	High-mass Drell-Yan cross section measurement at ATLAS	Mr. WOLLSTADT, Simon
10:12	Search for Z gamma anomalous coupling	Mr. HINDRICHS, Otto

Higgs Physics - SR 4a (09:00-10:35)

- **Conveners: Prof. Quast, Günter; Prof. Harlander, Robert; Kroseberg, Juergen**

time	title	presenter
09:00	Search for SM VH->bb with ATLAS	HAGEBOEK, Stephan
09:20	Search for MSSM Higgs production in the bb channel with CMS	Mr. BEHR, Joerg
09:40	Search for H->2mu in MSSM and SM at CMS	WEBER, Hendrik
10:05	Total Higgs width from WW fusion at the ILC	Mrs. DUERIG, Claude
10:20	Top and bottom mass effects in Higgs production at small pt	Mr. WIESEMANN, Marius

Top Physics Parallel Session II - SR 4b (09:00-10:50)

- **Conveners: Dr. Kroeninger, Kevin; Prof. Uwer, Peter; Bernreuther, Werner; Prof. Schilling, Frank**

time	title	presenter
09:00	Top-Quark Measurements in All-Jets Final States	Mr. SCHLIECKAU, Eike
09:20	Studies of Systematic Uncertainties with Profile Likelihood Fits	Mr. STOLTE, Philipp

09:40	HATHOR for Calculating Single-Top Production	Mr. KINTSCHER, Thomas
09:55	Top-Quark Charge Asymmetry with a Jet Handle	Dr. BERGE, Stefan
10:15	Extraction of α_S from $t\bar{t}$ cross section	Mr. NAUMANN-EMME, Sebastian

BSM Physics Parallel Session I - SR 3 (11:00-12:00)

- **Conveners: Mr. Dreiner, Herbert; Sander, Christian; Prof. Krämer, Michael; Dr. Ehrenfeld, Wolfgang; Dr. Ellinghaus, Frank**

time	title	presenter
11:00	Search for Chargino Neutralino production at CMS	WAYAND, Stefan
11:15	A generalised narrow-width approximation for interference effects in the MSSM	FUCHS, Elina
11:30	Search for RPV SUSY in dilepton events	ENDRES, Matthias
11:45	Z' in a $U(1)_{\{B-L\}}$ extension of the MSSM and in particular its decays into sleptons	KRAUS, Manuel

EW and QCD Physics - Parallel Session II - SR 1 (11:00-12:00)

- **Conveners: Dr. Rabbertz, Klaus; Pozzorini, Stefano; Dr. Schumann, Steffen; Heinrich, Gudrun; Lohwasser, Kristin**

time	title	presenter
11:00	Towards a theory for multiple hard scattering in QCD	Dr. DIEHL, Markus
11:18	ZFITTER and LHC physics	Dr. RIEMANN, Tord
11:36	Status of the Global EW Fit with a SM Higgs Boson	KOGLER, Roman

Higgs Physics - SR 4a (11:00-12:00)

- **Conveners: Prof. Quast, Günter; Prof. Harlander, Robert; Kroseberg, Juergen**

time	title	presenter
11:00	Estimation of Theory Systematics in MSSM Neutral Higgs Searches	Mr. MORGENSTERN, Marcus
11:20	MSSM Interpretations of the LHC Discovery: Light or Heavy Higgs	ZEUNE, Lisa
11:40	Confronting Higgs sectors with experimental data from LEP, Tevatron and LHC with HiggsBounds and HiggsSignals	STEFANIAK, Tim

Top Physics Parallel Session II - SR 4b (11:00-12:15)

- **Conveners: Dr. Kroeninger, Kevin; Prof. Uwer, Peter; Bernreuther, Werner; Prof. Schilling, Frank**

time	title	presenter
11:00	Top-Mass Measurement in Lepton+Jets Final States	Mr. SEIDEL, Markus
11:20	Anomalous Top Couplings in WHIZARD	Mr. BACH, Fabian
11:35	Measurement of the inclusive $t\bar{t} + \gamma$ cross section with the ATLAS detector	ROSENTHAL, Oliver

Accelerator Project - SR 4b (13:30-16:00)

- **Conveners: Dr. Osterhoff, Jens; Dr. Elsen, Eckhard**

time	title	presenter
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13:30	Progress in high gradient superconducting cavities	Mr. NAVITSKI, Aliaksandr
14:15	Progress in Plasma Wakefield Acceleration	Mr. SCHAPER, Lucas
15:00	Optical analysis of Nb surfaces for SCRF applications	Mr. WENSKAT, Marc

Analysis Project - SR 3 (13:30-16:00)

- **Conveners: Mr. Dreiner, Herbert; Uwer, Ulrich**

time	title	presenter
13:30	Central Jet Veto Working Group	BLUMENSCHNEIN, Ulla
13:45	mtautau Working Group	KORMOLL, Kathrin
14:00	Higgs boson masses in the complex NMSSM at one-loop level	WALZ, Kathrin
14:15	Higgs Low-Energy Theorem (and its corrections) in Composite Models	GRÖBER, Ramona
14:30	SusHi - a program to calculate the MSSM Higgs production cross section at the LHC	MANTLER, Hendrik
14:45	LHC explores what LEP hinted at: CP-violating type-I 2HDM	PARK, Jae-Hyeon
15:00	Little Higgs models in light of the 125 GeV discovery at the LHC	TONONI, Marco
15:15	Dirac Gauginos and the 125 GeV Higgs	STAUB, Florian
15:30	A fat gluino in disguise	REUTER, Jürgen
15:45	How Difficult Is It To Conserve R-Parity In The B-L-Extended MSSM?	O'LEARY, Ben

Detector Project - SR 1 (13:30-16:00)

- **Conveners: Feld, Lutz**

time	title	presenter
13:30	Bestrahlungen und Charakterisierung	Dr. DIERLAMM, Alexander
13:55	A Test Bench for a Fast Data	Dr. FLICK, Tobias
14:20	Novel Powering Concepts for Tracking Detectors	Dr. KLEIN, Katja
14:45	Ageing and background sensitivity of	RUSCHKE, Alexander
15:10	Virtual SiPM Laboratory	Prof. GARUTTI, Erika
15:35	Bump Bonding	KREIDL, Christian

Grid Project - SR 4a (13:30-16:00)

- **Conveners: Mr. Kasemann, Matthias**

time	title	presenter
13:30	T1 Computing: Status Report and Outlook	Dr. HEISS, Andreas
13:50	T2 Computing in Germany	DUCKECK, Guenter
14:10	Networking for LHC Data Analysis	Dr. OHRENBERG, Kars
14:30	The Happy Face Monitoring Project	Mr. VOLLMER, Gregor
14:50	WorkFlow Management	FISCHER, Max
15:10	Data Storage for Analysis	Dr. MILLAR, Paul

15:30	The NAF: Status Report and Outlook	Dr. KEMP, Yves
15:50	Discussion: Computing for Data Analysis in 2013-14	

Institute Assembly - SR 1 (16:00-17:30)

NAF Users Meeting - SR 4 a/b (16:00-17:35)

- Conveners: Dr. Kemp, Yves; Dr. Stadie, Hartmut; Dr. Ehrenfeld, Wolfgang

time	title	presenter
16:00	NAF user's experience: ATLAS	Dr. GRAHN, Karl-Johan
16:15	Short overview on NAF 2.0: Why? What? When?	Dr. KEMP, Yves
16:35	First Experiences with NAF 2.0: CMS	Mr. SCHLIECKAU, Eike Mr. DRAEGER, Arne-Rasmus Dr. STADIE, Hartmut
16:50	Discussion: Current NAF and Future NAF	

Plenary - Auditorium Building 5 (17:30-18:30)

time	title	presenter
17:30	The Future of the Terascale	HEUER, Rolf

Conference Dinner - Canteen Building 9 (19:00-22:00)

Wednesday 05 December 2012

Plenary Session - Auditorium Building 5 (09:00-11:00)

time	title	presenter
09:00	Searches	WEBER, Martin
09:40	LHC Upgrade and Outlook	NASH, Jordan
10:20	Roadmap for a Linear Collider	STAPNES, Steinar

Plenary Session - Auditorium Building 5 (11:30-13:00)

time	title	presenter
11:30	Alliance Projects 2013/14	
	- Enabling Technologies for Silicon Microstrip Tracking Detectors at the HL-LHC	FELD, Lutz
	- Inclusive and Semi-Inclusive Constraints on the Parton Distributions at the LHC and the Study of Hard Processes	Dr. BLUEMLEIN, Johannes
	- Performance optimization for the present and next generation HEP data analysis on the Grid	Mr. KASEMANN, Matthias
12:30	Zukunft der Allianz	MNICH, Joachim

IAB Meeting - Conference room building 1C O2-331 (13:15-14:00)

CJV Session - 4 a (14:00-17:00)

- Conveners: Blumenschein, Ulla; Jaeger, Barbara

time	title	presenter
14:00	VBF and Powheg	JAEGER, Barbara
14:30	CJV studies in H->WW	HSU, Pai-Hsien
15:00	VBF W in Sherpa	Ms. FISCHER, Julia
15:30	VBS in Atlas	SOCHER, Felix
16:00	Z+jets background for VBF	BIERWAGEN, Katharina Mr. DRECHSLER, Eric

Monte Carlo Meeting - SR 01 (14:00-18:00)

- Conveners: Dr. Nagy, Zoltan