

**QCD@LHC 2016**

# **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Recent Highlights from the LHC

*Monday, 22 August 2016 10:00 (45 minutes)*

**Presenter:** CUEVAS MAESTRO, Javier (Universidad de Oviedo)

**Session Classification:** Plenary

Contribution ID: 2

Type: **not specified**

## QCD results from the LHC

*Monday, 22 August 2016 10:45 (45 minutes)*

**Presenter:** GLAZOV, Alexander (Deutsches Elektronen-Synchrotron (DE))

**Session Classification:** Plenary

Contribution ID: 3

Type: **not specified**

## QCD results: fixed order

*Monday, 22 August 2016 12:00 (35 minutes)*

**Presenter:** CAOLA, Fabrizio (CERN)

**Session Classification:** Plenary

Contribution ID: 4

Type: **not specified**

## **EW corrections**

*Monday, 22 August 2016 12:35 (35 minutes)*

**Presenter:** UCCIRATI, Sandro (INFN - National Institute for Nuclear Physics)

**Session Classification:** Plenary

Contribution ID: 5

Type: **not specified**

## **Multiboson results from the LHC**

*Tuesday, 23 August 2016 09:00 (45 minutes)*

**Presenter:** SAVIN, Alexander (UW)

**Session Classification:** Plenary

Contribution ID: 6

Type: **not specified**

## **QCD: resummation**

*Tuesday, 23 August 2016 09:45 (35 minutes)*

**Presenter:** MONNI, Pier Francesco (University of Oxford (GB))

**Session Classification:** Plenary

Contribution ID: 7

Type: **not specified**

## SCET

*Tuesday, 23 August 2016 11:00 (35 minutes)*

**Presenter:** BECHER, Thomas (University of Bern)

**Session Classification:** Plenary



Contribution ID: 8

Type: **not specified**

## Recent LHC results with impact on parton density functions

*Tuesday, 23 August 2016 11:35 (45 minutes)*

### Summary

**Presenter:** MUELLER, Katharina (Universitaet Zuerich (CH))

**Session Classification:** Plenary

Contribution ID: 9

Type: **not specified**

## Review on PDFs

*Tuesday, 23 August 2016 12:20 (35 minutes)*

**Presenter:** RADESCU, Voica Ana Maria (University of Oxford (GB))

**Session Classification:** Plenary

Contribution ID: **10**

Type: **not specified**

## Top quark results from the LHC

*Wednesday, 24 August 2016 09:00 (45 minutes)*

### Summary

**Presenter:** CASTRO, Nuno Filipe (LIP, University of Minho and University of Porto (PT))

**Session Classification:** Plenary

Contribution ID: 11

Type: **not specified**

## Top theory

*Wednesday, 24 August 2016 09:45 (35 minutes)*

**Presenter:** FREDERIX, Rikkert (TUM)

**Session Classification:** Plenary

Contribution ID: 12

Type: **not specified**

## **Soft QCD and MC generator tuning**

*Wednesday, 24 August 2016 10:20 (45 minutes)*

### **Summary**

**Presenter:** FIELD, Richard Dryden (University of Florida (US))

**Session Classification:** Plenary

Contribution ID: 13

Type: **not specified**

## Event generators

*Wednesday, 24 August 2016 11:35 (35 minutes)*

**Presenter:** PRESTEL, Stefan

**Session Classification:** Plenary

Contribution ID: 14

Type: **not specified**

## Recent highlights on heavy quarks

*Wednesday, 24 August 2016 12:10 (45 minutes)*

### Summary

**Presenter:** Dr KOPPENBURG, Patrick (Nikhef National institute for subatomic physics (NL))

**Session Classification:** Plenary

Contribution ID: 15

Type: **not specified**

## **Bottom theory**

*Wednesday, 24 August 2016 12:55 (35 minutes)*

**Presenter:** ZWICKY, Roman (edinburgh university)

**Session Classification:** Plenary



Contribution ID: 16

Type: **not specified**

## **Lattice determination of $\alpha_s$**

*Friday, 26 August 2016 09:00 (40 minutes)*

**Presenter:** SOMMER, Rainer

**Session Classification:** Plenary

Contribution ID: 17

Type: **not specified**

## Heavy ion results

*Thursday, 25 August 2016 09:35 (45 minutes)*

### Summary

**Presenter:** PEITZMANN, Thomas (Nikhef National institute for subatomic physics (NL))

**Session Classification:** Plenary

Contribution ID: **18**

Type: **not specified**

## High-density QCD

*Thursday, 25 August 2016 11:00 (35 minutes)*

**Presenter:** BRATKOVSKAYA, Elena (FIAS)

**Session Classification:** Plenary

Contribution ID: 19

Type: **not specified**

## QCD in Higgs and BSM

*Friday, 26 August 2016 09:40 (45 minutes)*

**Presenter:** FACINI, Gabriel (University of Chicago (US))

**Session Classification:** Plenary

Contribution ID: 20

Type: **not specified**

## QCD in Higgs physics

*Thursday, 25 August 2016 09:00 (35 minutes)*

**Presenter:** MISTLBERGER, Bernhard (CERN)

**Session Classification:** Plenary

Contribution ID: 21

Type: **not specified**

## Future facilities

*Friday, 26 August 2016 10:25 (45 minutes)*

**Presenter:** D'ENTERRIA, David (CERN)

**Session Classification:** Plenary

Contribution ID: 22

Type: **not specified**

## Experimental summary

*Friday, 26 August 2016 11:40 (40 minutes)*

**Presenter:** RABBERTZ, Klaus (KIT - Karlsruhe Institute of Technology (DE))

**Session Classification:** Plenary

Contribution ID: 23

Type: **not specified**

## Theoretical summary

*Friday, 26 August 2016 12:20 (40 minutes)*

**Presenter:** MELNIKOV, Kirill (Karlsruhe Institute of Technology, Germany)

**Session Classification:** Plenary



Contribution ID: 24

Type: **not specified**

## Updates from NNPDF: fitted charm and NNPDF3.1

*Monday, 22 August 2016 15:00 (30 minutes)*

**Presenter:** ROJO CHACON, Juan (University of Oxford (GB))

**Session Classification:** PDFs

Contribution ID: 25

Type: **not specified**

## **MMHT PDF update - impact of new data**

*Monday, 22 August 2016 14:30 (30 minutes)*

### **Summary**

**Presenter:** THORNE, Robert Samuel (University College London (UK))

**Session Classification:** PDFs

Contribution ID: 26

Type: **not specified**

## Progress in (N)NLO fast calculations for PDF fits

*Monday, 22 August 2016 15:30 (30 minutes)*

### Summary

**Presenter:** SUTTON, Mark (University of Sussex (GB))

**Session Classification:** PDFs

Contribution ID: 27

Type: **not specified**

## Resummation in PDF fits

*Monday, 22 August 2016 16:30 (30 minutes)*

**Presenter:** BONVINI, Marco (University of Oxford)

**Session Classification:** PDFs

Contribution ID: 28

Type: **not specified**

## **ATLAS: PDF sensitive measurements using ratios**

*Monday, 22 August 2016 17:30 (30 minutes)*

### **Summary**

**Presenter:** LOHWASSER, Kristin (Deutsches Elektronen-Synchrotron (DE))

**Session Classification:** PDFs

Contribution ID: 29

Type: **not specified**

## PDF constraints using Vector Bosons at CMS

*Monday, 22 August 2016 17:00 (30 minutes)*

### Summary

**Presenter:** PLACAKYTE, Ringaile

**Session Classification:** PDFs

Contribution ID: **30**

Type: **not specified**

## Overview of the photon PDF

*Tuesday, 23 August 2016 14:30 (30 minutes)*

**Presenter:** HARLAND-LANG, Lucian (University College London)

**Session Classification:** PDFs

Contribution ID: 31

Type: **not specified**

## **ATLAS: high mass Drell-Yan and the photon PDF**

*Tuesday, 23 August 2016 15:00 (30 minutes)*

### **Summary**

**Presenter:** RIZVI, Eram Syed (Queen Mary, University of London)

**Session Classification:** PDFs



Contribution ID: 32

Type: **not specified**

## **The impact of the photon PDF on $t\bar{t}$ bar distributions**

*Tuesday, 23 August 2016 15:30 (30 minutes)*

### **Summary**

**Presenter:** PAGANI, Davide

**Session Classification:** PDFs

Contribution ID: 33

Type: **not specified**

## Developments in the xFitter framework

*Tuesday, 23 August 2016 16:30 (30 minutes)*

**Presenter:** RADESCU, Voica Ana Maria (University of Oxford (GB))

**Session Classification:** PDFs

Contribution ID: 34

Type: **not specified**

## **PDFs and Heavy Quark production in the forward region**

*Tuesday, 23 August 2016 17:00 (30 minutes)*

**Presenter:** GAULD, Rhorry (IPPP Durham University)

**Session Classification:** PDFs

Contribution ID: 35

Type: **not specified**

## **Charm, bottom and top production in the forward region**

*Tuesday, 23 August 2016 17:30 (30 minutes)*

### **Summary**

**Presenter:** SILVA COUTINHO, Rafael (Universitaet Zuerich (CH))

**Session Classification:** PDFs

Contribution ID: **36**

Type: **not specified**

## Updates from ABM

*Thursday, 25 August 2016 14:30 (30 minutes)*

**Presenter:** ALEKHIN, Sergey (DESY-Zeuthen)

**Session Classification:** PDFs

Contribution ID: 37

Type: **not specified**

## Recent developments in the CT global analysis

*Thursday, 25 August 2016 15:00 (30 minutes)*

**Presenter:** STUMP, Daniel (Michigan State University)

**Session Classification:** PDFs

Contribution ID: **38**

Type: **not specified**

## **Jets and PDFs with CMS data**

*Thursday, 25 August 2016 15:30 (30 minutes)*

### **Summary**

**Presenter:** VOUTILAINEN, Mikko (University of Helsinki (FI))

**Session Classification:** PDFs

Contribution ID: 39

Type: **not specified**

## PDF fits with $t\bar{t}$ different distributions at NNLO

*Thursday, 25 August 2016 16:30 (30 minutes)*

**Presenter:** Dr NOCERA, Emanuele Roberto (University of Oxford)

**Session Classification:** PDFs



Contribution ID: 40

Type: **not specified**

## Lattice calculation of parton distributions

**Presenter:** WEN LIN, Huey-

**Session Classification:** PDFs

Contribution ID: 41

Type: **not specified**

## **Top quark mass determination from the energy peaks of b-jets and B-hadrons at NLO QCD**

*Monday, 22 August 2016 14:30 (25 minutes)*

**Presenter:** FRANCESCHINI, Roberto (CERN)

**Session Classification:** Heavy quarks

Contribution ID: 42

Type: **not specified**

## Single top quark production cross section and properties with ATLAS

*Monday, 22 August 2016 14:55 (25 minutes)*

**Presenter:** STAMM, Soren (Humboldt-Universitaet zu Berlin (DE))

**Session Classification:** Heavy quarks

Contribution ID: 43

Type: **not specified**

## Single top quark production with CMS

*Monday, 22 August 2016 15:20 (25 minutes)*

**Presenter:** KOMM, Matthias (Universite Catholique de Louvain (UCL) (BE))

**Session Classification:** Heavy quarks

Contribution ID: 44

Type: **not specified**

# **The Matrix Element Method at next-to-leading order QCD for single top-quark production at the LHC**

*Monday, 22 August 2016 15:45 (20 minutes)*

## **Summary**

**Presenter:** MARTINI, Till (HU Berlin)

**Session Classification:** Heavy quarks

Contribution ID: 45

Type: **not specified**

## **Top quark pair production in association with a jet with NLO QCD off-shell effects**

*Monday, 22 August 2016 16:30 (20 minutes)*

**Presenter:** HARTANTO, Heribertus Bayu (RWTH Aachen University)

**Session Classification:** Heavy quarks

Contribution ID: 46

Type: **not specified**

## **Top quark pair production cross section measurements with CMS**

*Monday, 22 August 2016 16:50 (25 minutes)*

**Presenter:** KRINTIRAS, Georgios (Universite Catholique de Louvain (UCL) (BE))

**Session Classification:** Heavy quarks

Contribution ID: 47

Type: **not specified**

# Top quark pair production and properties with ATLAS

*Monday, 22 August 2016 17:15 (25 minutes)*

## Summary

**Presenter:** LIE, Ki (Univ. Illinois at Urbana-Champaign (US))

**Session Classification:** Heavy quarks



Contribution ID: 48

Type: **not specified**

## **Quarkonium production as a probe of double parton scattering at ATLAS**

**Session Classification:** Heavy quarks

Contribution ID: 49

Type: **not specified**

## **LHCb results on associated production of heavy hadrons**

*Tuesday, 23 August 2016 14:30 (25 minutes)*

**Presenter:** BELYAEV, Ivan (ITEP/MOSCOW)

**Session Classification:** Heavy quarks

Contribution ID: 50

Type: **not specified**

## **Measurements of heavy flavour production directly or in association with W and Z bosons with ATLAS**

*Tuesday, 23 August 2016 14:55 (25 minutes)*

### **Summary**

**Presenters:** CHIODINI, Gabriele (INFN Lecce); CHIODINI, Gabriele (Universita del Salento (IT))

**Session Classification:** Heavy quarks

Contribution ID: 51

Type: **not specified**

## **Transverse-momentum resummation for heavy-quark production at hadron colliders**

*Tuesday, 23 August 2016 15:20 (25 minutes)*

**Presenter:** SARGSYAN, Hayk (University of Zurich)

**Session Classification:** Heavy quarks

Contribution ID: 52

Type: **not specified**

## **LHCb results on b-hadron production and properties**

*Thursday, 25 August 2016 17:30 (25 minutes)*

**Presenter:** NEEDHAM, Matthew David (University of Edinburgh (GB))

**Session Classification:** Heavy quarks

Contribution ID: 53

Type: **not specified**

## **LHCb results on baryonic B decays**

*Tuesday, 23 August 2016 16:40 (25 minutes)*

**Presenter:** VOSS, Christian (Universitaet Rostock (DE))

**Session Classification:** Heavy quarks

Contribution ID: 54

Type: **not specified**

## **Recent NNLO results on heavy flavor corrections to DIS**

*Tuesday, 23 August 2016 15:45 (25 minutes)*

**Presenter:** Prof. BLUEMLEIN, Johannes (DESY)

**Session Classification:** Heavy quarks

Contribution ID: 55

Type: **not specified**

## **Heavy flavour spectroscopy and decays at ATLAS**

**Session Classification:** Heavy quarks



Contribution ID: 56

Type: **not specified**

## **LHCb results on heavy quark spectroscopy**

*Tuesday, 23 August 2016 17:05 (25 minutes)*

**Presenter:** CRAIK, Daniel Charles (University of Edinburgh (GB))

**Session Classification:** Heavy quarks

Contribution ID: 57

Type: **not specified**

## **LHCb results on exotic spectroscopy**

*Tuesday, 23 August 2016 17:30 (25 minutes)*

**Presenter:** CAVALLERO, Giovanni (Universita e INFN Genova (IT))

**Session Classification:** Heavy quarks

Contribution ID: 58

Type: **not specified**

## **Quarkonium and heavy flavour production at ATLAS**

*Thursday, 25 August 2016 14:30 (25 minutes)*

**Presenter:** JONES, Roger (Lancaster University (GB))

**Session Classification:** Heavy quarks

Contribution ID: 59

Type: **not specified**

# Quarkonium cross sections in pp collisions with CMS

*Thursday, 25 August 2016 14:55 (25 minutes)*

## Summary

**Presenter:** KRATSCHMER, Ilse (Austrian Academy of Sciences (AT))

**Session Classification:** Heavy quarks

Contribution ID: **60**

Type: **not specified**

## **Quarkonium polarization in pp collisions with CMS**

*Thursday, 25 August 2016 15:20 (25 minutes)*

**Presenter:** SEIXAS, Joao (LIP Laboratorio de Instrumentacao e Fisica Experimental de Part)

**Session Classification:** Heavy quarks

Contribution ID: 61

Type: **not specified**

## **A data-driven interpretation of heavy quarkonium measurements at the LHC**

*Thursday, 25 August 2016 15:45 (25 minutes)*

**Presenter:** FACCIOLO, Pietro (LIP and IST, Lisbon)

**Session Classification:** Heavy quarks

Contribution ID: 62

Type: **not specified**

## Heavy quarkonium physics case for AFTER

*Thursday, 25 August 2016 16:40 (25 minutes)*

**Presenter:** SHAO, Huasheng (CERN)

**Session Classification:** Heavy quarks

Contribution ID: 63

Type: **not specified**

## **Charmonium and bottomonium suppression in PbPb collisions with CMS**

### **Summary**

**Presenter:** CHAPON, Emilien (Centre National de la Recherche Scientifique (FR))

**Session Classification:** Heavy quarks



Contribution ID: 64

Type: **not specified**

## **LHCb results and perspectives on heavy-ion physics**

**Session Classification:** Heavy quarks

Contribution ID: 65

Type: **not specified**

## **Open charm production in pPb and PbPb collisions with CMS**

**Presenter:** INNOCENTI, Gian Michele (Massachusetts Inst. of Technology (US))

**Session Classification:** Heavy quarks

Contribution ID: 66

Type: **not specified**

## **Open charm and beauty production in pPb collisions with ALICE**

**Presenter:** JAHNKE, Cristiane (Technische Universitaet Muenchen (DE))

**Session Classification:** Heavy quarks

Contribution ID: 67

Type: **not specified**

## Theory precision for the gluon fusion cross section

*Monday, 22 August 2016 14:30 (22 minutes)*

**Presenter:** BONVINI, Marco (University of Oxford)

**Session Classification:** Higgs

Contribution ID: 68

Type: **not specified**

## **Bosonic SM Higgs decays at ATLAS + CMS**

*Monday, 22 August 2016 15:00 (22 minutes)*

### **Summary**

**Presenters:** HUANG, Yanping (Chinese Academy of Sciences (CN)); HUANG, Yanping (Chinese Academy of Sciences (CN)); HUANG, Yanping (Deutsches Elektronen-Synchrotron (DE))

**Session Classification:** Higgs

Contribution ID: 69

Type: **not specified**

## Fermionic SM Higgs decays at ATLAS + CMS

*Monday, 22 August 2016 15:30 (22 minutes)*

### Summary

**Presenter:** CHERNYAVSKAYA, Nadezda (Eidgenoessische Tech. Hochschule Zuerich (CH))

**Session Classification:** Higgs

Contribution ID: 70

Type: **not specified**

## Experimental results on $gg \rightarrow t\bar{t}H$ from ATLAS and CMS

*Monday, 22 August 2016 16:30 (22 minutes)*

### Summary

**Presenter:** THOMAS-WILSKER, Joshuha (Royal Holloway, University of London (GB))

**Session Classification:** Higgs

Contribution ID: 71

Type: **not specified**

## Theory precision for ttH signal and backgrounds

*Monday, 22 August 2016 17:00 (22 minutes)*

**Presenters:** POZZORINI, Stefano Augusto (Universitaet Zuerich (CH)); POZZORINI, Stefano

**Session Classification:** Higgs



Contribution ID: 72

Type: **not specified**

## Accurate predictions for charged Higgs production for $m_{H^\pm} \sim m_t$

*Monday, 22 August 2016 17:30 (22 minutes)*

### Summary

**Presenter:** FREDERIX, Rikkert (TUM)

**Session Classification:** Higgs

Contribution ID: 73

Type: **not specified**

## Resummation in Higgs physics

*Tuesday, 23 August 2016 14:30 (22 minutes)*

**Presenter:** ROTHEN, Lorena (University of Bern)

**Session Classification:** Higgs

Contribution ID: 74

Type: **not specified**

## **Simplified cross sections**

*Tuesday, 23 August 2016 15:00 (22 minutes)*

**Presenter:** FRANCAVILLA, Paolo (LPNHE and Institute Lagrange de Paris - ILP (FR))

**Session Classification:** Higgs

Contribution ID: 75

Type: **not specified**

## **Experimental results on differential Higgs boson cross sections from ATLAS and CMS**

*Tuesday, 23 August 2016 15:30 (22 minutes)*

### **Summary**

**Presenter:** VILLANI, Lorenzo (Universita e INFN, Firenze (IT))

**Session Classification:** Higgs

Contribution ID: 76

Type: **not specified**

## **Experimental results on di-photon, ZZ and WW resonances from ATLAS and CMS**

*Tuesday, 23 August 2016 16:30 (22 minutes)*

### **Summary**

**Presenter:** WU, Mengqing (Chinese Academy of Sciences (CN))

**Session Classification:** Higgs

Contribution ID: 77

Type: **not specified**

## **Theory predictions for off-shell ZZ and WW production including Higgs boson effects**

*Tuesday, 23 August 2016 17:00 (22 minutes)*

**Presenter:** TANCREDI, Lorenzo (KIT Karlsruhe)

**Session Classification:** Higgs

Contribution ID: 78

Type: **not specified**

## **Exploiting jet binning to identify the initial state of high-mass resonances**

*Tuesday, 23 August 2016 17:30 (22 minutes)*

**Presenter:** EBERT, Markus (DESY)

**Session Classification:** Higgs

Contribution ID: 79

Type: **not specified**

## Theory status of bottom-quark associated Higgs production

*Thursday, 25 August 2016 14:30 (22 minutes)*

**Presenters:** PAPANASTASIOU, Andrew (University of Durham); PAPANASTASIOU, Andrew Sofronis (University of Durham (GB)); PAPANASTASIOU, Andrew Sofronis (Deutsches Elektronen-Synchrotron (DE)); PAPANASTASIOU, Andrew Sofronis (DESY)

**Session Classification:** Higgs



Contribution ID: 80

Type: **not specified**

## **Heavy neutral and charged Higgs boson searches in the MSSM and the 2HDM at ATLAS and CMS**

*Thursday, 25 August 2016 15:00 (22 minutes)*

### **Summary**

**Presenter:** VAN ONSEM, Gerrit (Deutsches Elektronen-Synchrotron (DESY))

**Session Classification:** Higgs

Contribution ID: **81**

Type: **not specified**

## **Effective Higgs Lagrangian at NLO QCD**

*Thursday, 25 August 2016 15:30 (22 minutes)*

**Presenter:** GAULD, Rhorry (IPPP Durham University)

**Session Classification:** Higgs

Contribution ID: 82

Type: **not specified**

## **Experimental results on rare decays of the 125GeV Higgs boson from ATLAS and CMS**

*Thursday, 25 August 2016 16:30 (22 minutes)*

### **Summary**

**Presenters:** ATLAS; GENG, Cong (Univ. of Michigan (US) / Univ. of Science & Tech. of China (CN))

**Session Classification:** Higgs

Contribution ID: 83

Type: **not specified**

# Theory Predictions for Higgs Boson Pair Production

*Thursday, 25 August 2016 17:00 (22 minutes)*

## Summary

**Presenter:** Dr JONES, Stephen (MPI, Munich)

**Session Classification:** Higgs

Contribution ID: 84

Type: **not specified**

## **Differential Higgs Boson Pair Production at Next-to-Next-to-Leading Order in QCD**

*Thursday, 25 August 2016 17:30 (22 minutes)*

### **Summary**

**Presenters:** LINDERT, Jonas; LINDERT, Jonas

**Session Classification:** Higgs

Contribution ID: 85

Type: **not specified**

## **Precision measurements of inclusive and differential Drell-Yan cross sections with the ATLAS detector**

*Monday, 22 August 2016 14:30 (30 minutes)*

**Presenter:** CAMARDA, Stefano (CERN)

**Session Classification:** Hard QCD+EW

Contribution ID: 86

Type: **not specified**

## **Inclusive and differential cross sections of single vector boson production in CMS**

*Monday, 22 August 2016 15:00 (30 minutes)*

**Presenter:** NIU, Xinmei (Massachusetts Inst. of Technology (US))

**Session Classification:** Hard QCD+EW

Contribution ID: 87

Type: **not specified**

## Gauge boson physics in the forward region at LHCb

*Monday, 22 August 2016 15:30 (20 minutes)*

Measurements of the gauge bosons are crucial for testing the present day Standard Model. The fully instrumented coverage of the LHCb detector in the forward region provides a valuable insight in an unexplored kinematic region for proton parton distribution functions through high precision  $Z^0/W^\pm$  production and ratio measurements at the available centre-of-mass LHC energies. The currently most precise measurement of the weak mixing angle at a hadron collider using the angular charge asymmetry in the di-muonic decay of Z bosons produced in  $pp$  collisions at  $\sqrt{s} = 8$  TeV is also presented.

### Summary

**Presenter:** GRECU, Alex (IFIN-HH Bucharest (RO))

**Session Classification:** Hard QCD+EW



Contribution ID: **88**

Type: **not specified**

## **Mixed QCD/EW corrections to Drell-Yan processes in the resonance region**

*Monday, 22 August 2016 15:50 (20 minutes)*

**Presenter:** SCHWINN, Christian (RWTH Aachen University)

**Session Classification:** Hard QCD+EW

Contribution ID: 89

Type: **not specified**

## **Challenges in W mass measurements with ATLAS and CMS**

*Monday, 22 August 2016 16:40 (30 minutes)*

**Presenter:** CUTH, Jakub (Johannes Gutenberg Universitat Mainz (DE))

**Session Classification:** Hard QCD+EW

Contribution ID: 90

Type: **not specified**

## **Precision measurements at Tevatron (canceled)**

*Monday, 22 August 2016 17:10 (30 minutes)*

### **Summary**

**Session Classification:** Hard QCD+EW

Contribution ID: 91

Type: **not specified**

## Precision computation for EW measurements

*Monday, 22 August 2016 17:40 (20 minutes)*

**Presenter:** VICINI, Alessandro (Università degli Studi e INFN Milano (IT))

**Session Classification:** Hard QCD+EW

Contribution ID: 92

Type: **not specified**

# Measurements of the production of prompt photons, jets and vector bosons + jets in pp collisions with the ATLAS detector

*Tuesday, 23 August 2016 14:30 (30 minutes)*

## Summary

**Presenter:** BOSSIO, Jonathan (Universidad de Buenos Aires (AR))

**Session Classification:** Hard QCD+EW

Contribution ID: 93

Type: **not specified**

## Associated production of vector bosons and jets in CMS

*Tuesday, 23 August 2016 15:00 (30 minutes)*

**Presenter:** ZHANG, Fengwangdong (Universite Libre de Bruxelles (BE))

**Session Classification:** Hard QCD+EW

Contribution ID: 94

Type: **not specified**

## **W/Z + jets and top in LHCb**

*Tuesday, 23 August 2016 15:30 (20 minutes)*

### **Summary**

**Presenter:** HULSBERGEN, Wouter (Nikhef National institute for subatomic physics (NL))

**Session Classification:** Hard QCD+EW

Contribution ID: 95

Type: **not specified**

## **Z+jet @ NNLO**

*Tuesday, 23 August 2016 15:50 (20 minutes)*

**Presenter:** Dr HUSS, Alexander (ETH Zurich)

**Session Classification:** Hard QCD+EW



Contribution ID: 96

Type: **not specified**

## Hard QCD and EW results from HERA

*Tuesday, 23 August 2016 16:40 (30 minutes)*

**Presenters:** BRITZGER, Daniel (Deutsches Elektronen-Synchrotron (DE)); BRITZGER, Daniel (DESY)

**Session Classification:** Hard QCD+EW

Contribution ID: 97

Type: **not specified**

## **Inclusive jet and multijet measurements in CMS**

*Tuesday, 23 August 2016 17:10 (30 minutes)*

**Presenter:** Dr VOUTILAINEN, Mikko (University of Helsinki (FI))

**Session Classification:** Hard QCD+EW

Contribution ID: **98**

Type: **not specified**

## **QCD JETS @ NNLO**

*Tuesday, 23 August 2016 17:40 (20 minutes)*

**Presenter:** CURRIE, James (University of Durham)

**Session Classification:** Hard QCD+EW

Contribution ID: 99

Type: **not specified**

## **Multiboson production and vector boson scattering measurements in CMS**

*Thursday, 25 August 2016 14:30 (30 minutes)*

**Presenter:** SHVETSOV, Ivan (KIT - Karlsruhe Institute of Technology (DE))

**Session Classification:** Hard QCD+EW

Contribution ID: **100**

Type: **not specified**

## Recent di-boson measurements from ATLAS

*Thursday, 25 August 2016 15:00 (30 minutes)*

**Presenters:** DI CIACCIO, Lucia (Centre National de la Recherche Scientifique (FR)); DI CIACCIO, Lucia (Centre National de la Recherche Scientifique (FR))

**Session Classification:** Hard QCD+EW

Contribution ID: **101**

Type: **not specified**

# Fully differential NNLO(+NNLL) computations with MATRIX

*Thursday, 25 August 2016 15:30 (20 minutes)*

**Presenter:** WIESEMANN, Marius (Universitaet Zuerich (CH))

**Session Classification:** Hard QCD+EW

Contribution ID: **102**

Type: **not specified**

## **NLO EW corrections to pp -> W+W- -> 4l at the LHC**

*Thursday, 25 August 2016 15:50 (20 minutes)*

**Presenter:** SALFELDER, Lukas (University of Tuebingen)

**Session Classification:** Hard QCD+EW

Contribution ID: **103**

Type: **not specified**

## **LHCb results on central exclusive production**

*Thursday, 25 August 2016 17:00 (20 minutes)*

### **Summary**

**Presenter:** SZUMLAK, Tomasz (AGH University of Science and Technology (PL))

**Session Classification:** Hard QCD+EW



Contribution ID: **104**

Type: **not specified**

## **Recent results on VBF, VBS, exclusive WW and tri-boson production from ATLAS**

*Thursday, 25 August 2016 16:40 (20 minutes)*

**Presenter:** ZHANG, Ruiqi (CPPM/USTC)

**Session Classification:** Hard QCD+EW

Contribution ID: **105**

Type: **not specified**

## **Vector Boson Scattering: QCD and EW corrections**

*Thursday, 25 August 2016 17:20 (20 minutes)*

**Presenter:** SCHWAN, Christopher (Universität Freiburg)

**Session Classification:** Hard QCD+EW

Contribution ID: **106**

Type: **not specified**

## **NLO EW corrections to off-shell top quark pair**

**Presenter:** PELLEN, Mathieu (University Wuerzburg)

**Session Classification:** Hard QCD+EW

Contribution ID: **107**

Type: **not specified**

## **Results on minimum bias interactions and underlying event from ATLAS**

*Monday, 22 August 2016 14:30 (25 minutes)*

**Presenter:** SALZBURGER, Andreas (CERN)

**Session Classification:** Monte Carlo

Contribution ID: **108**

Type: **not specified**

## **Measurement of underlying events and DPS at CMS**

*Monday, 22 August 2016 15:00 (25 minutes)*

### **Summary**

**Presenter:** MEHTA, Ankita (Panjab University (IN))

**Session Classification:** Monte Carlo

Contribution ID: **109**

Type: **not specified**

## **Top quark event modelling and generators in CMS**

*Monday, 22 August 2016 15:30 (25 minutes)*

**Presenter:** YAZGAN, Efe (Ghent University (BE))

**Session Classification:** Monte Carlo

Contribution ID: 110

Type: **not specified**

## **Impact of LHCb results on the tuning of Monte Carlo generators**

*Monday, 22 August 2016 16:30 (25 minutes)*

**Presenter:** GRECU, Alex (IFIN-HH Bucharest (RO))

**Session Classification:** Monte Carlo

Contribution ID: **111**

Type: **not specified**

## **Introduction to informal discussion**

*Monday, 22 August 2016 17:00 (10 minutes)*

**Presenter:** FIELD, Richard Dryden (University of Florida (US))

**Session Classification:** Monte Carlo



Contribution ID: 112

Type: **not specified**

## Informal discussion

*Monday, 22 August 2016 17:10 (40 minutes)*

**Session Classification:** Monte Carlo

Contribution ID: 113

Type: **not specified**

## **Measurements of the elastic, inelastic and total pp cross section with the ATLAS detector**

*Tuesday, 23 August 2016 14:30 (25 minutes)*

**Presenter:** HILLER, Karlheinz (Deutsches Elektronen-Synchrotron Campus Zeuthen (DE))

**Session Classification:** Monte Carlo

Contribution ID: 114

Type: **not specified**

## **Herwig 7: overview and recent developments**

*Tuesday, 23 August 2016 15:00 (25 minutes)*

**Presenter:** SIODMOK, Andrzej Konrad (CERN)

**Session Classification:** Monte Carlo

Contribution ID: 115

Type: **not specified**

## **Sherpa: overview and recent developments**

*Tuesday, 23 August 2016 15:30 (25 minutes)*

**Presenter:** SCHOENHERR, Marek (Universitaet Zuerich (CH))

**Session Classification:** Monte Carlo

Contribution ID: 116

Type: **not specified**

## Vincia recent developments (+ Pythia8 overview)

*Tuesday, 23 August 2016 16:30 (25 minutes)*

### Summary

**Presenter:** FISCHER, Nadine (Monash University)

**Session Classification:** Monte Carlo

Contribution ID: 117

Type: **not specified**

## **Resonance-aware NLOPS (MC@NLO)**

*Tuesday, 23 August 2016 17:00 (20 minutes)*

**Presenter:** TORRIELLI, Paolo (Universita e INFN Torino (IT))

**Session Classification:** Monte Carlo

Contribution ID: 118

Type: **not specified**

## **Resonance-aware NLOPS in POWHEG for top-pair and single-top physics**

*Tuesday, 23 August 2016 17:25 (20 minutes)*

### **Summary**

**Presenter:** LINDERT, Jonas

**Session Classification:** Monte Carlo

Contribution ID: **119**

Type: **not specified**

## **MINLO**

*Thursday, 25 August 2016 14:30 (20 minutes)*

**Presenter:** HAMILTON, Keith (University College London (GB))

**Session Classification:** Monte Carlo



Contribution ID: **120**

Type: **not specified**

## Geneva

*Thursday, 25 August 2016 14:55 (20 minutes)*

**Presenter:** BAUER, Christian

**Session Classification:** Monte Carlo

Contribution ID: 121

Type: **not specified**

# Threshold logarithms in a parton shower

*Thursday, 25 August 2016 15:20 (20 minutes)*

## Summary

**Presenter:** NAGY, Zoltan

**Session Classification:** Monte Carlo

Contribution ID: 122

Type: **not specified**

## Recent developments in High Energy Jets (HEJ)

*Thursday, 25 August 2016 15:45 (20 minutes)*

### Summary

**Presenter:** SMILLIE, Jennifer (University of Edinburgh)

**Session Classification:** Monte Carlo

Contribution ID: 123

Type: **not specified**

## **NLOPS with KrKNLO**

*Thursday, 25 August 2016 16:40 (20 minutes)*

**Presenter:** SIODMOK, Andrzej Konrad (CERN)

**Session Classification:** Monte Carlo

Contribution ID: 124

Type: **not specified**

## **EW and mixed EW+QCD uncertainties in the W boson mass measurement**

*Thursday, 25 August 2016 17:05 (20 minutes)*

### **Summary**

**Presenter:** MARTINEZ BRUZUAL, Homero (Universita e INFN (IT))

**Session Classification:** Monte Carlo

Contribution ID: 125

Type: **not specified**

## The LPM effect in sequential gluon bremsstrahlung

*Thursday, 25 August 2016 17:30 (20 minutes)*

### Summary

**Presenter:** IQBAL, Shahin (University of Virginia)

**Session Classification:** Monte Carlo

Contribution ID: 126

Type: **not specified**

## **Determination of $\alpha_s$ in a fit to inclusive jet data from multiple experiments**

*Thursday, 25 August 2016 11:40 (20 minutes)*

### **Summary**

**Presenter:** SAVOIU, Daniel (KIT - Karlsruhe Institute of Technology (DE))

**Session Classification:** Hard QCD+EW

Contribution ID: 127

Type: **not specified**

## **Multi-leg scattering amplitudes for LHC phenomenology: modern tools and methods**

*Thursday, 25 August 2016 12:20 (20 minutes)*

**Presenter:** PERARO, Tiziano

**Session Classification:** Hard QCD+EW



Contribution ID: 128

Type: **not specified**

## The pentabox master integrals with the simplified differential equations approach

*Thursday, 25 August 2016 12:40 (20 minutes)*

**Presenter:** PAPADOPOULOS, Konstantinos (Nat. Cent. for Sci. Res. Demokritos (GR))

**Session Classification:** Hard QCD+EW

Contribution ID: 129

Type: **not specified**

## **NNLL soft and Coulomb threshold resummation for squark and gluino production at the LHC**

*Thursday, 25 August 2016 17:40 (20 minutes)*

**Presenter:** WEVER, Chris (Karlsruhe Institute of Technology)

**Session Classification:** Hard QCD+EW

Contribution ID: 130

Type: **not specified**

## **Open charm production in pPb and PbPb collisions with CMS**

*Thursday, 25 August 2016 11:35 (20 minutes)*

**Presenter:** INNOCENTI, Gian Michele (Massachusetts Inst. of Technology (US))

**Session Classification:** Heavy quarks

Contribution ID: 131

Type: **not specified**

# LHCb results and perspectives on heavy-ion physics

*Thursday, 25 August 2016 11:55 (20 minutes)*

## Summary

**Presenter:** SCHMIDT, Burkhard (CERN)

**Session Classification:** Heavy quarks

Contribution ID: 132

Type: **not specified**

## **Charmonium and bottomonium suppression in PbPb collisions with CMS**

*Thursday, 25 August 2016 12:15 (20 minutes)*

### **Summary**

**Presenter:** CHAPON, Emilien (Centre National de la Recherche Scientifique (FR))

**Session Classification:** Heavy quarks

Contribution ID: 133

Type: **not specified**

# Open heavy-flavour production in pp, p-Pb and Pb-Pb collisions with ALICE

*Thursday, 25 August 2016 12:35 (25 minutes)*

## Summary

**Presenter:** JAHNKE, Cristiane (Technische Universitaet Muenchen (DE))

**Session Classification:** Heavy quarks

Contribution ID: 134

Type: **not specified**

# Quarkonium production as a probe of double parton scattering at ATLAS

*Thursday, 25 August 2016 17:05 (25 minutes)*

## Summary

**Presenter:** BERTSCHE, David Edwin (Deutsches Elektronen-Synchrotron (DE))

**Session Classification:** Heavy quarks

Contribution ID: 135

Type: **not specified**

## **NLO EW corrections to off-shell top quark pair production**

*Monday, 22 August 2016 17:40 (20 minutes)*

**Presenter:** PELLEN, Mathieu (University Wuerzburg)

**Session Classification:** Heavy quarks



Contribution ID: 136

Type: **not specified**

## **Three-jet event shapes at high precision: old and new**

*Thursday, 25 August 2016 12:00 (20 minutes)*

**Presenter:** TROCSANYI, Zoltan Laszlo (University of Debrecen (HU))

**Session Classification:** Hard QCD+EW

Contribution ID: 137

Type: **not specified**

## **Welcome address by the dean of the faculty of science**

*Monday, 22 August 2016 09:50 (10 minutes)*

### **Summary**

**Presenter:** SCHAEPMAN, Michael (Universität Zürich)

**Session Classification:** Plenary