

**BOOST2015: 7th International
Workshop on Boosted Object
Phenomenology,
Reconstruction and Searches
in HEP**

Report of Contributions

Contribution ID: 0

Type: **not specified**

Summary of BOOST 2014

Monday, 10 August 2015 09:10 (30 minutes)

Presenter: RAPPOCCIO, Salvatore (State University of New York (US))

Session Classification: Introduction and Overviews

Contribution ID: 1

Type: **not specified**

Overview of the current status and prospects of LHC for discovery in Run 2

Monday, 10 August 2015 09:50 (30 minutes)

Presenter: DOBRESU, Bogdan (Fermilab)

Session Classification: Introduction and Overviews

Contribution ID: 2

Type: **not specified**

Searches for dark matter using boosted topologies in CMS

Monday, 10 August 2015 11:00 (25 minutes)

Presenter: HAHN, Kristian (Northwestern University (US))

Session Classification: Searches for New Physics Session

Contribution ID: 3

Type: **not specified**

ATLAS searches for new physics

Monday, 10 August 2015 11:30 (20 minutes)

Presenter: KAGAN, Michael Aaron (SLAC National Accelerator Laboratory (US))

Session Classification: Searches for New Physics Session

Contribution ID: 4

Type: **not specified**

Using Jet Substructure for QCD

Monday, 10 August 2015 13:30 (25 minutes)

Presenter: LARKOSKI, Andrew (Massachusetts Institute of Technology)

Session Classification: Measurements and Calculations Session

Contribution ID: 5

Type: **not specified**

Measurements of jet charge and colour flow in ATLAS

Monday, 10 August 2015 14:00 (25 minutes)

Presenter: NACHMAN, Ben (SLAC National Accelerator Laboratory (US))

Session Classification: Measurements and Calculations Session

Contribution ID: 6

Type: **not specified**

Factorization and resummation of jet substructure observables

Monday, 10 August 2015 14:30 (25 minutes)

Presenters: MOULT, Ian James (Massachusetts Inst. of Technology (US)); MOULT, Ian

Session Classification: Measurements and Calculations Session

Contribution ID: 7

Type: **not specified**

Jet substructure methods for signal jets

Monday, 10 August 2015 16:45 (25 minutes)

Presenter: SIODMOK, Andrzej Konrad (CERN)

Session Classification: Measurements and Calculations Session

Contribution ID: 8

Type: **not specified**

Boosted top quarks in physics analyses at CMS

Monday, 10 August 2015 16:15 (25 minutes)

Presenter: PILOT, Justin (University of California Davis (US))

Session Classification: Measurements and Calculations Session

Contribution ID: 9

Type: **not specified**

Probing the Core of QCD

Monday, 10 August 2015 15:45 (25 minutes)

Presenter: THALER, Jesse (MIT)

Session Classification: Measurements and Calculations Session

Contribution ID: **10**

Type: **not specified**

Tagging boosted top quarks and Higgs bosons in ATLAS

Tuesday, 11 August 2015 09:00 (25 minutes)

Presenter: LEBLANC, Matt (University of Victoria (CA))

Session Classification: Top and Heavy Flavor Tagging Session

Contribution ID: 11

Type: **not specified**

Boosted top identification with pattern recognition - jet substructure with neural networks

Tuesday, 11 August 2015 09:30 (25 minutes)

Presenter: BACKOVIC, Mihailo (CP3-UCL)

Session Classification: Top and Heavy Flavor Tagging Session

Contribution ID: 12

Type: **not specified**

Resonance searches with an updated HEPTopTagger

Tuesday, 11 August 2015 10:00 (25 minutes)

Presenter: SCHELL, Torben (Heidelberg University)

Session Classification: Top and Heavy Flavor Tagging Session

Contribution ID: 13

Type: **not specified**

Boosted W/Z/H bosons in physics analyses at CMS

Tuesday, 11 August 2015 11:00 (25 minutes)

Presenter: DOLEN, James William (State University of New York (US))

Session Classification: W/Z/H Boson Tagging Session

Contribution ID: 14

Type: **not specified**

Boosted boson tagging and W/Z separation in ATLAS

Tuesday, 11 August 2015 11:30 (25 minutes)

Presenter: CAUDRON, Julien (Johannes-Gutenberg-Universitaet Mainz (DE))

Session Classification: W/Z/H Boson Tagging Session

Contribution ID: 15

Type: **not specified**

Discovery and study of resonances decaying to boosted vector bosons

Tuesday, 11 August 2015 13:30 (25 minutes)

Presenter: GAINER, James (University of Florida (US))

Session Classification: Searches for New Physics Session

Contribution ID: **16**

Type: **not specified**

ATLAS di-boson resonance searches in Run 1

Tuesday, 11 August 2015 14:00 (25 minutes)

Presenter: DELITZSCH, Chris Malena (Universite de Geneve (CH))

Session Classification: Searches for New Physics Session

Contribution ID: 17

Type: **not specified**

New results from CMS on the search for VV/VH/HH resonances in Run 1

Tuesday, 11 August 2015 14:30 (25 minutes)

Presenter: HINZMANN, Andreas (Universitaet Zuerich (CH))

Session Classification: Searches for New Physics Session

Contribution ID: **18**

Type: **not specified**

W/Z/Top tagging for Run 2 in CMS

Wednesday, 12 August 2015 09:00 (25 minutes)

Presenter: KASIECZKA, Gregor (Eidgenoessische Tech. Hochschule Zuerich (CH))

Session Classification: New Jet and Jet Substructure Results

Contribution ID: **19**

Type: **not specified**

ATLAS jet performance in the first data in Run 2

Wednesday, 12 August 2015 09:30 (25 minutes)

Presenter: VAROUCHAS, Dimitris (Centre National de la Recherche Scientifique (FR), LPNHE--Paris)

Session Classification: New Jet and Jet Substructure Results

Contribution ID: 20

Type: **not specified**

Telescoping jet substructure

Wednesday, 12 August 2015 10:00 (25 minutes)

Presenter: Dr CHIEN, Yang-Ting (Los Alamos National Laboratory)

Session Classification: New Jet and Jet Substructure Results

Contribution ID: 21

Type: **not specified**

CMS results on b-tagging in boosted topologies

Wednesday, 12 August 2015 11:00 (25 minutes)

Presenter: VERNIERI, Caterina (Fermi National Accelerator Lab. (US))

Session Classification: Jet Algorithms and Tagging Session

Contribution ID: 22

Type: **not specified**

The X-Cone Jet Algorithm

Wednesday, 12 August 2015 11:30 (25 minutes)

Presenter: WILKASON JR, Thomas Frederick (Massachusetts Inst. of Technology (US))

Session Classification: Jet Algorithms and Tagging Session

Contribution ID: 23

Type: **not specified**

Pile-up mitigation techniques for jets in CMS

Wednesday, 12 August 2015 13:30 (25 minutes)

Presenter: HASEGAWA, Satoshi (Fermi National Accelerator Lab. (US))

Session Classification: Jet Algorithms and Tagging Session

Contribution ID: 24

Type: **not specified**

Emerging jets

Wednesday, 12 August 2015 14:00 (25 minutes)

Presenter: SCHWALLER, Pedro Klaus (CERN)

Session Classification: Jet Algorithms and Tagging Session

Contribution ID: 25

Type: **not specified**

Subjet mass constraints on boosted jets

Wednesday, 12 August 2015 14:30 (25 minutes)

Presenter: SAREM SCHUNK, Lais (IPhT, CEA Saclay)

Session Classification: Jet Algorithms and Tagging Session

Contribution ID: 26

Type: **not specified**

Phenomenology of Microjets

Wednesday, 12 August 2015 15:45 (25 minutes)

Presenter: DREYER, Frederic Alexandre (LPTHE & CERN)

Session Classification: Measurements and Calculations Session

Contribution ID: 27

Type: **not specified**

ATLAS measurements of boosted object (W/Z/top) production

Wednesday, 12 August 2015 16:15 (25 minutes)

Presenter: ARGUIN, Jean-Francois (Universite de Montreal (CA))

Session Classification: Measurements and Calculations Session

Contribution ID: 28

Type: **not specified**

CMS measurements of the cross-section for highly boosted top quarks

Wednesday, 12 August 2015 16:45 (25 minutes)

Presenter: DITTMER, Susan J (Cornell University (US))

Session Classification: Measurements and Calculations Session

Contribution ID: 29

Type: **not specified**

QCD-aware clustering

Thursday, 13 August 2015 10:00 (25 minutes)

Presenter: POLLARD, Chris (University of Glasgow (GB))

Session Classification: New Jet and Jet Substructure Results

Contribution ID: **30**

Type: **not specified**

Early Run 2 physics results from ATLAS

Thursday, 13 August 2015 09:30 (25 minutes)

Presenter: RUIZ MARTINEZ, Arantxa (CERN)

Session Classification: New Jet and Jet Substructure Results

Contribution ID: **31**

Type: **not specified**

CMS first results from Run 2

Thursday, 13 August 2015 09:00 (25 minutes)

Presenter: HARRIS, Philip Coleman (CERN)

Session Classification: New Jet and Jet Substructure Results

Contribution ID: 32

Type: **not specified**

CMS triggers with boosted objects or jet substructure

Thursday, 13 August 2015 11:00 (25 minutes)

Presenter: RANKIN, Dylan Sheldon (Boston University (US))

Session Classification: New Experimental ideas

Contribution ID: 33

Type: **not specified**

ATLAS Run 3 studies and boosted object trigger development

Thursday, 13 August 2015 11:30 (25 minutes)

Presenter: BEGEL, Michael (Brookhaven National Laboratory (US))

Session Classification: New Experimental ideas

Contribution ID: 34

Type: **not specified**

Boosted Higgs -> bb in association with a vector boson at 14 TeV

Thursday, 13 August 2015 13:30 (25 minutes)

Presenter: BUTTERWORTH, Jonathan (University College London (UK))

Session Classification: Future Colliders Session

Contribution ID: 35

Type: **not specified**

Performance requirements for future hadronic calorimeters

Thursday, 13 August 2015 14:00 (25 minutes)

Presenter: CHEKANOV, Sergei (Argonne National Laboratory (US))

Session Classification: Future Colliders Session

Contribution ID: 36

Type: **not specified**

Challenges and opportunities for jet substructure in the superboosted regime

Thursday, 13 August 2015 14:30 (25 minutes)

Presenter: PEREZ, Gilad (CERN & Weizmann)

Session Classification: Future Colliders Session

Contribution ID: 37

Type: **not specified**

Tagging very boosted tops at future collider

Thursday, 13 August 2015 15:45 (25 minutes)

Presenter: SELVAGGI, Michele (Universite Catholique de Louvain (UCL) (BE))

Session Classification: Future Colliders Session

Contribution ID: 38

Type: **not specified**

Lessons Learned from Sensitivity Studies to High-Mass Resonances Decaying to $t\bar{t}$ at a 100 TeV Collider

Thursday, 13 August 2015 16:15 (25 minutes)

Presenter: LOVE, Jeremy Robert (Argonne National Laboratory (US))

Session Classification: Future Colliders Session

Contribution ID: 39

Type: **not specified**

BOOST 2015 Theory Summary

Friday, 14 August 2015 09:00 (45 minutes)

Presenter: LARKOSKI, Andrew (Massachusetts Institute of Technology)

Session Classification: Summary Session

Contribution ID: 40

Type: **not specified**

BOOST 2015 Experimental Summary

Friday, 14 August 2015 09:45 (45 minutes)

Presenter: ASQUITH, Lily (University of Sussex (UK))

Session Classification: Summary Session

Contribution ID: 41

Type: **not specified**

Welcome from the Chair of the Physics Department at the University of Chicago

Monday, 10 August 2015 09:00 (5 minutes)

Presenter: BLUCHER, Ed

Session Classification: Welcome to Chicago and BOOST 2015

Contribution ID: 45

Type: **not specified**

BOOST 2016 in Zurich

Friday, 14 August 2015 10:30 (5 minutes)

Presenter: KASIECZKA, Gregor (Eidgenoessische Tech. Hochschule Zuerich (CH))

Session Classification: Announcement of BOOST 2016