

## **Session Program**

**3-7 Apr 2017**



# **25th International Workshop on Deep Inelastic Scattering and Related Topics**

## ***WG3 Higgs and BSM Physics in Hadron Collisions***

University of Birmingham, School of Physics and Astronomy  
Edgbaston Birmingham B15 2TT United Kingdom

# Tuesday 4 April

09:00

## WG3 Higgs and BSM Physics in Hadron Collisions

Session | Location: Nuffield Building G17

09:00–09:15

**Cross section and coupling measurements with the ATLAS detector for the 125 GeV Higgs Boson in the diboson decay channels**

**Speaker**

William Axel Leight

09:18–09:33

**Higgs boson measurements and extended scalar sector searches in bosonic final states**

**Speaker**

Seth Zenz

09:36–09:51

**Cross section and coupling measurements with the ATLAS detector for the 125 GeV Higgs Boson in the fermion decay channels**

**Speaker**

Duc Bao Ta

09:54–10:09

**Higgs boson measurements and extended scalar sector searches in fermionic final states**

**Speaker**

Teresa Lenz

10:12–10:27

**Finite mass effects in Higgs and double Higgs production**

**Speaker**

Gionata Luisoni

10:30

11:00

## WG3 Higgs and BSM Physics in Hadron Collisions

Session | Location: Nuffield Building G17

11:00–11:15

**Search for the 125 GeV Higgs boson in the ttH production mode with the ATLAS detector**

**Speaker**

Elemer Nagy

11:20–11:35

**ttH and tHq production at 13 TeV**

**Speaker**

Georgios Krintiras

11:40–11:55

**NLO matching for  $t\bar{t}b\bar{b}$  production with massive b-quarks**

13:00

**Speaker**  
Tomas Jezo

12:00–12:15

**Soft Gluon Resummation Beyond NLL for Associated  $t\bar{t}H$  Production at the LHC**

**Speaker**  
Vincent Theeuwes

12:20–12:35

**Parton shower and finite-top mass effects in HH production**

**Speaker**  
Matthias Kerner

12:40–12:55

**Higgs pair production in vector-boson fusion at the LHC and beyond**

**Speaker**  
Juan Rojo

14:00

**WG3 Higgs and BSM Physics in Hadron Collisions**

Session | Location: Nuffield Building G17

14:00–14:15

**Completing the hadronic Higgs boson decay at order  $\alpha_s^4$**

**Speaker**  
Josh Davies

14:18–14:33

**Higgs decay into four charged leptons in presence of dimension six operators**

**Speaker**  
Dr Ambresh Shivaji

14:36–14:51

**Electro-weak Higgs production in standard model effective field theory at NLO in QCD**

**Speaker**  
Ken Mimasu

14:54–15:09

**Search for non-standard and rare decays of the Higgs boson with the ATLAS detector**

**Speaker**  
Roger Caminal Armadans

15:12–15:27

**Prospects for new physics in tau decays to  $l\mu\mu$  at current and future colliders**

**Speaker**  
Chris Hays

15:30

16:00

**WG3 Higgs and BSM Physics in Hadron Collisions**

Session | Location: Nuffield Building G17

16:00–16:15

**Dark Matter searches with the ATLAS Detector**

**Speaker**  
Cora Fischer

16:20–16:35

**Searches for dark matter at CMS in events with missing transverse energy****Speaker**

Christian Laner Ogilvy

16:40–16:55

**Searches for electroweak production of supersymmetry with CMS****Speaker**

Ece Asilar

17:00–17:15

**Search for direct production of charginos and neutralinos with the ATLAS detector****Speakers**

Itzebelt Santoyo Castillo, Itzebelt Santoyo Castillo

17:20–17:35

**Supersymmetric signals in Z' decays****Speaker**

Gennaro Corcella

17:40–17:55

**Naturalness and Dark Matter in the BLSSM****Speaker**

Simon King

18:00

## Wednesday 5 April

09:00

### WG3 Higgs and BSM Physics in Hadron Collisions

Session | Location: Nuffield Building G17

09:00–09:15 **Search for third generation squarks with the ATLAS detector**

**Speaker**

John Kenneth Anders

09:18–09:33

**Searches for supersymmetric partners of third-generation quarks with CMS**

**Speaker**

Marketa Jansova

09:36–09:51

**Search for R-parity violating SUSY and long lived particles with the ATLAS detector**

**Speaker**

Nathan Rogers Bernard

09:54–10:09

**Search for squarks and gluinos in final states with leptons with the ATLAS detector**

**Speaker**

Danijela Bogavac

10:12–10:27

**CMS searches for supersymmetry in leptonic final states**

**Speaker**

Nacho Suarez Andres

10:30

11:00

### WG3 Higgs and BSM Physics in Hadron Collisions

Session | Location: Nuffield Building G17

11:00–11:20

**ATLAS Searches for VH, HH, VV, V+gamma/gammagamma Resonances**

**Speaker**

Nicolo Vladi Biesuz

11:24–11:44

**Search for new resonances decaying into W, Z and H bosons at CMS**

**Speaker**

Alberto Zucchetta

11:48–12:08

**Searches for high mass BSM scalars**

**Speaker**

Kyungwook Nam

12:12–12:32

**Searches for low mass BSM particles using the 125 GeV Higgs**

**Speaker**

Chayanit Asawatangtrakuldee

12:36-12:56

**Searches for Heavy Higgs bosons A, H, H<sup>+</sup> and H<sup>++</sup> with the ATLAS detector****Speaker**

Imma Riu

13:00

14:00

**WG3 Higgs and BSM Physics in Hadron Collisions****Session** | **Location:** Nuffield Building G17

14:00-14:15

**Search for New Phenomena in Dijet Events with the ATLAS Detector at  $\sqrt{s} = 13$  TeV****Speaker**

Hanno Meyer Zu Theenhausen

14:18-14:33

**Search for new physics with dijets at CMS at 13 TeV****Speaker**

Jingyu Zhang

14:36-14:51

**Limits on the effective quark radius from inclusive ep scattering and contact interactions at HERA****Speaker**

Oleksii Turkot

14:54-15:09

**Photon-Initiated processes at the LHC****Speaker**

Juri Fiaschi

15:12-15:27

**New limit on heavy neutrino from NA62****Speaker**

Christopher John Parkinson

15:30

16:00

**WG3 Higgs and BSM Physics in Hadron Collisions****Session** | **Location:** Nuffield Building G17

16:00-16:20

**Search for vector like quarks and heavy resonances decaying to top quarks****Speaker**

Clement Camincher

16:24-16:44

**Search for heavy non-SUSY BSM particles in boosted final states****Speaker**

Mareike Meyer

16:48-17:08

**Production of extra quarks decaying to Dark Matter at the LHC beyond the Narrow Width Approximation****Speaker**

Hugo Prager

17:12-17:32

**Searches for new phenomena in final states involving 'leptons and jets' or involving leptons using the ATLAS detector**

**Speaker**

Yanlin Liu

17:36-17:56

**Searches for BSM physics in dilepton, multilepton, and lepton+MET final states at CMS**

**Speaker**

Halil Saka

18:00