

Session Program

30 September 2019 to 4 October 2019

Higgs Couplings 2019

Plenary

Monday 30 September

14:00

Plenary: Opening session

Session | **Location:** Martin Wood Lecture Theatre Parks Road, Oxford | **Convener:** Prof. Subir Sarkar

14:00–14:15 **Welcome**

Speaker

Ian Shipsey

14:20–14:50 **Higgs and the Universe**

Speaker

Geraldine Servant

15:00–15:20 **Higgs physics from the top down**

Speaker

Graham Garland Ross

15:30–15:50

Higgs searches, Electroweak measurements, and B-anomalies at LHCb

Speaker

William Barter

16:00

16:30

Plenary: Hadron collisions

Session | **Location:** Martin Wood Lecture Theatre Parks Road, Oxford | **Convener:** Dr Lucian Harland-Lang

16:30–16:50 **Parton distribution functions**

Speaker

Maria Ubiali

17:00–17:20 **Parton shower modelling**

Speaker

Keith Hamilton

17:30–17:50 **PDF & parton shower modelling at ATLAS and CMS**

Speaker

James Edward Ferrando

18:00

Tuesday 1 October

09:00

Plenary: Higgs boson decays to gauge bosons

Session | **Location:** Martin Wood Lecture Theatre Parks Road, Oxford | **Convener:** Fabrizio Caola

09:00–09:20 Gluon fusion production

Speakers

Bernhard Mistlberger, Bernhard Mistlberger

09:30–09:50 Measurements of Higgs couplings to gauge bosons at CMS and ATLAS

Speaker

Piergiulio Lenzi

10:00–10:20 Higgs mass and width measurements at ATLAS and CMS

Speaker

Mingshui Chen

10:30

11:00

Plenary: Higgs boson decays to third-generation fermions

Session | **Location:** Martin Wood Lecture Theatre Parks Road, Oxford | **Convener:** Gavin Salam

11:00–11:20 Jet substructure

Speaker

Simone Marzani

11:30–11:50 Higgs decays to third-generation fermions at CMS

Speaker

Janek Bechtel

12:00–12:20 Higgs decays to third-generation fermions at ATLAS

Speaker

Pier-Olivier Deviveiros

12:30

14:15

Plenary: Other Higgs boson couplings to fermions

Session | **Location:** Martin Wood Lecture Theatre Parks Road, Oxford | **Convener:** Nicholas Wardle

14:15–14:35 Modelling signal and background for ttH and tH measurements

Speaker

Marco Zaro

14:40–15:00 Measurements of ttH and tH production at ATLAS & CMS

Speaker

Peter Onyisi

15:05–15:25 Higgs decays to light fermions at ATLAS

Speaker

Jan Kretzschmar

15:30-15:50

Higgs decays to light fermions at CMS

Speaker

Dr Luca Mastrolorenzo

16:00

Wednesday 2 October

09:00

Plenary: Effective field theory I

Session | **Location:** Martin Wood Lecture Theatre Parks Road, Oxford | **Convener:** Marumi Kado

09:00–09:20 **Effective field theory and Higgs physics**

Speaker

Giampiero Passarino

09:30–09:50 **A fit to Higgs and top data in the SMEFT**

Speaker

Fabio Maltoni

10:00–10:25 **A fit to Higgs and Electroweak data in the SMEFT**

Speaker

Michael Robert Trott

10:30

11:00

Plenary: Effective field theory II

Session | **Location:** Martin Wood Lecture Theatre Parks Road, Oxford | **Convener:** Marco Pieri

11:00–11:20 **Perturbative corrections in the SMEFT**

Speaker

Sara Lynn Dawson

11:30–11:50 **ATLAS Higgs cross section combination and EFT interpretations**

Speaker

Nicolas Berger

12:00–12:20 **CMS Higgs cross section combination and EFT interpretations**

Speaker

Meng Xiao

12:30

Thursday 3 October

09:00

Plenary: CP in Higgs physics

Session | **Location:** Martin Wood Lecture Theatre Parks Road, Oxford | **Convener:** Chris Hays

09:00–09:20 **Probing CP-odd Higgs couplings**

Speaker

Michael Spannowsky

09:30–09:50 **CP in Higgs couplings at CMS**

Speaker

Savvas Kyriacou

10:00–10:20 **CP in Higgs couplings at ATLAS**

Speaker

Lianliang Ma

10:30

11:00

Plenary: The Higgs potential

Session | **Location:** Martin Wood Lecture Theatre Parks Road, Oxford | **Convener:** Alan Barr

11:00–11:20 **The Higgs potential, naturalness, & oblique corrections**

Speaker

Matthew Philip Mccullough

11:30–11:50 **Higgs self-couplings at ATLAS and CMS**

Speaker

Luca Cadamuro

12:00–12:20 **Search for four-top production at CMS & ATLAS**

Speaker

Freya Blekman

12:30

14:30

Plenary: Exotic Higgs boson production

Session | **Location:** Martin Wood Lecture Theatre Parks Road, Oxford | **Convener:** Cigdem Issever

14:30–14:50 **Additional Higgs bosons**

Speaker

Heather Logan

15:00–15:20 **Searches for Higgs bosons in resonance decays at ATLAS and CMS**

Speaker

Gaetano Barone

15:30–15:50 **Searches for exotic Higgs boson production at CMS and ATLAS**

Speaker

Paul Thompson

16:00

16:30

Plenary: Exotic Higgs boson decay

Session | **Location:** Martin Wood Lecture Theatre Parks Road, Oxford | **Convener:** Maria Cepeda

16:30–16:50 **Exotic decays of SM & BSM Higgs bosons**

Speaker

stefania gori

17:00–17:20 **Searches for exotic visible Higgs boson decays at CMS and ATLAS**

Speaker

Marina Kolosova

17:30–17:50 **Searches for invisible Higgs boson decays at ATLAS and CMS**

Speaker

Christian Sander

18:00

Friday 4 October

09:00

Plenary: Prospects

Session | **Location:** Martin Wood Lecture Theatre Parks Road, Oxford | **Convener:** Prof. Daniela Bortoletto

09:00–09:30 **Higgs at future hadron colliders**

Speaker

Michele Selvaggi

09:45–10:15 **Higgs at future lepton colliders**

Speaker

Daniel Jeans

10:30

11:00

Plenary: Closing session

Session | **Location:** Martin Wood Lecture Theatre Parks Road, Oxford | **Convener:** Ian Shipsey

11:00–11:30 **Detectors of the future**

Speaker

Marcel Demarteau

11:45–12:15 **Progress with the Update of the European Strategy**

Speaker

Richard Keith Ellis

12:30