

# **Session Program**

**18-22 Oct 2021**



**Higgs 2021**

***Plenary***

# Monday 18 October

09:25

## Plenary: Opening

Session | Convener: Viviana Cavaliere

09:25–09:55 **“New Higgs results from ATLAS” (20+10)**

**Speaker**

Marc Escalier

09:55–10:25 **“New Higgs results from CMS” (20+10)**

**Speaker**

Keti Kaadze

10:25–11:00 **“Higgs physics in the precision era” (25+10)**

**Speakers**

Gavin Salam, Gavin Salam

11:00

11:30

## Plenary: Opening 2

Session | Convener: Maria Cepeda

11:30–12:05 **“BSM Higgs theory overview” (25+10)**

**Speaker**

Scott Thomas

12:05–12:25 **ATLAS: Wildcard (15+5)**

**Speaker**

Quentin Buat

12:25–12:45 **CMS: Wildcard (15+5)**

**Speaker**

Nicholas Wardle

12:45

12:45

## Plenary: Young Scientist talks

Session | Convener: Marc-Andre Pleier

12:45–12:55

**More light on Higgs flavor at the LHC: Higgs couplings to light quarks through  $h+\gamma$  production**

**Speaker**

Jose Manuel Cano

13:00–13:10

**Fully differential Higgs production in VBF at NNLO, including the decay of the Higgs boson**

**Speaker**

Konstantin Asteriadis

13:15

# Tuesday 19 October

09:00

## Plenary: Properties and Precision

Session | Convener: Stefano Augusto Pozzorini

09:00–09:30 **ATLAS+CMS: “SM Higgs-boson properties: mass, width, CP” (20+10)**

**Speaker**

Savvas Kyriacou

09:30–10:00 **Recent progress in precision calculations” (20+10)**

**Speaker**

Alexander Yohei Huss

10:00–10:30

**ATLAS+CMS: “Higgs-boson differential, fiducial, and total cross section measurements” (20+10)**

**Speaker**

Edward Scott

10:30–11:00

**ATLAS+CMS: “Higgs-boson couplings and simplified template cross section measurements” (20+10)**

**Speaker**

Rachel Jordan Hyneman

11:00

11:30

## Plenary: Flavor

Session | Convener: Patrick Meade

11:30–12:00 **ATLAS+CMS: “Quark Yukawa interactions” (20+10)**

**Speaker**

Loukas Gouskos

12:00–12:30 **ATLAS+CMS: “Lepton Yukawa interactions” (20+10)**

**Speaker**

Martina Laura Ojeda

12:30–13:00 **Higgs Flavor in light of anomalies” (20+10)**

**Speaker**

Clara Murgui

13:00

# Wednesday 20 October

10:30

## Plenary: DiHiggs

Session | Convener: Elizabeth Brost

10:30-11:00 **ATLAS: "Di-Higgs results - twice the Higgs, twice the fun" (20+10)**

**Speaker**  
Marco Valente

11:00-11:30 **CMS: "Di-Higgs results - twice the Higgs, twice the fun" (20+10)**

**Speaker**  
Petar Maksimovic

11:30-12:00 **"BSM targets for Di-Higgs searches" (20+10)**

**Speaker**  
Daniel Egana-Ugrinovic

12:00-12:30 **"SM theory for HH: signal and background" (20+10)**

**Speaker**  
Javier Mazzitelli

12:30

12:30

## Plenary: Young Scientist talks

Session | Convener: Paul Grannis

12:30-12:40

**Search for non-resonant di-Higgs production in the bby final state at 13 TeV with the ATLAS experiment**

**Speaker**  
Jannicke Pearkes

12:40-12:50 **Higgs Physics at a Muon Collider**

**Speaker**  
Luca Giambastiani

12:50-13:00 **Charm-jet tagging at the LHCb experiment**

**Speaker**  
Thomas Boettcher

13:00

14:30

## Plenary: BSM

Session | Convener: Luca Cadamuro

14:30-15:00

**ATLAS+CMS: "Exotic and invisible decays of the observed Higgs boson" (20+10)**

**Speaker**  
Scott Snyder

15:00-15:30

**ATLAS+CMS: "Searches for additional scalar or Higgs-like particles" (20+10)**

**Speaker**

Fabio Ravera

15:30-16:00

**“BSM Higgs: new states, exotic and invisible decays” (20+10)**

**Speaker**

Zhen Liu

16:00

# Thursday 21 October

09:00

## Plenary: EFT

Session | Convener: Andrei Gritsan

09:00–09:30 **Is SMEFT enough?**

**Speaker**  
Tim Cohen

09:30–10:00 **“EFT tools and global fits” (20+10)**

**Speaker**  
Ilaria Brivio

10:00–10:30 **ATLAS+CMS: “EFT results from Higgs and beyond” (20+10)**

**Speaker**  
Marco Battaglia

10:30

11:00

## Plenary: Theory input & experimental tools

Session | Convener: Michelangelo Mangano

11:00–11:40

**ATLAS+CMS: “Modelling of signal and background processes: where is a better understanding needed to make progress” (15+15+10)**

**Speakers**  
Adinda De Wit, Nicolas Morange

11:40–12:10 **“MC modelling of Higgs signals and backgrounds” (20+10)**

**Speaker**  
Frank Siegert

12:10–12:40 **“Parton Showers” (20+10)**

**Speaker**  
Simon Platzer

12:40

12:40

## Plenary: Young Scientist talks

Session | Convener: John David Hobbs

12:45–12:55 **Strange Quark as a Probe for New Physics in the Higgs Sector**

**Speaker**  
Matthew Basso

12:55–13:05

**Measurements of Higgs boson production cross sections in the  $H \rightarrow \tau\tau$  decay channel in  $pp$  collisions at  $\sqrt{s} = 13$  TeV with the ATLAS detector**

**Speaker**  
Kristina Mihule

13:05

# Friday 22 October

09:00

## Plenary: Future and closing remarks

Session | Convener: Sally Dawson

09:00–09:30 **ATLAS+CMS: “Higgs in the light of Run 3, Run 4 and beyond”**

**Speaker**

Marumi Kado

09:30–10:00 **“Higgs in the light of future facilities”**

**Speaker**

Isobel Ojalvo

10:00–10:30 **“Vision for using the Higgs”**

**Speaker**

Michelangelo Mangano

10:30–10:35 **Awards and closing remarks**

**Speakers**

Maria Cepeda, Michael Duehrssen-Debling

10:35–10:40 **Higgs Conference 2022**

**Speaker**

Paolo Francavilla

11:00