

Session Program

10-14 Jun 2024



SUSY24: The 31st International Conference on Supersymmetry and Unification of Fundamental Interactions

Higgs: theory and experiment

IFT (Madrid, Spain)

Instituto de Física Teórica / Institute of Theoretical Physics (Madrid, Spain) website: <https://www.ift.uam-csic.es/en>

Monday 10 June

15:05

Higgs: theory and experiment

Session | Location: Sala Azul

15:05–15:35 **Higgs physics: Quo Vadis?**

Speaker

Greg Landsberg

15:35–15:55 **Beyond the Standard Model in the Higgs sector at ATLAS**

Speaker

Tong Qiu

15:55–16:15 **The h_{95} at the LHC and e^+e^- colliders**

Speaker

Sven Heinemeyer

16:40

17:10

Higgs: theory and experiment

Session | Location: Sala Azul

17:10–17:35

Searches for rare decays of the Higgs boson into light pseudoscalars at CMS

Speaker

Maria Cepeda

17:35–18:00

Interplay of inert doublet and vector-like lepton triplet with displaced vertices at the LHC/FCC and MATHUSLA

Speaker

Priyotosh Bandyopadhyay

18:00–18:25 **ALPs vs. CP-odd Higgs bosons at the LHC**

Speaker

Georg Ralf Weiglein

18:25–18:50 **Collider probes of a first order electroweak phase transition**

Speaker

Kateryna Radchenko Serdula

18:50

Tuesday 11 June

15:05

Higgs: theory and experiment

Session | Location: Sala Azul

15:05–15:30

Measurements of Higgs boson production and decay rates with the ATLAS experiment

Speaker

Ricardo Barrué

15:30–15:55

Automatizing the path from Lagrangian to Higgs physics constraints

Speaker

Dr Wojciech Kotlarski

15:55–16:20

Higgs Mass Predictions in the CP-Violating High-Scale NMSSM

Speaker

Dr Christoph Borschensky

16:20–16:45

Measurements of Higgs boson properties (mass, width, and Spin/CP) with the ATLAS detector

Speaker

Davide Mungo

16:45

Thursday 13 June

15:05

Higgs: theory and experiment

Session | Location: Sala Azul

15:05–15:30

Precise predictions for the trilinear Higgs coupling in arbitrary models with anyH3

Speaker

Johannes Braathen

15:30–15:55

Searches for Higgs boson pair production at CMS

Speaker

Elvira Martin Viscasillas

15:55–16:20

Probing the nature of electroweak symmetry breaking with Higgs boson pairs in ATLAS

Speaker

Marin Mlinarevic

16:20–16:45

Impact of One-Loop Triple Higgs Couplings on Di-Higgs Production at e+e- colliders

Speaker

Francisco Arco

16:45

17:10

Higgs: theory and experiment

Session | Location: Sala Azul

17:10–17:35

Di-Higgs production in the RxSM at the HL-LHC taking into account 1-loop corrections to the trilinear Higgs couplings.

Speaker

Alain Verduras

17:35–18:00

Two-loop calculations of the trilinear Higgs coupling in general renormalisable theories

Speaker

Johannes Braathen

18:00–18:25

Impact of Loop Corrections to the Trilinear Higgs Couplings and Interference Effects on Experimental Limits

Speaker

Kateryna Radchenko Serdula

18:25–18:50

Investigating triple Higgs production to constrain the Higgs self-couplings at the HL-LHC and beyond

18:50

Speaker
Panagiotis Stylianou

Friday 14 June

10:00

Higgs: theory and experiment

Session | Location: Sala Azul

10:00–10:25

Electroweak Symmetry Restoration in Extended Higgs Sectors via Domain Walls

Speaker

Mohamed Younes Sassi

10:25–10:50

Precision Calculations of Effective Potentials and Electroweak Phase Transitions in the Early Universe

Speaker

Mr Andrii Dashko

10:50–11:15

Diving deep into the (N)MSSM potential: ML-enhanced analysis of vacuum stability

Speaker

Thomas Biekötter

11:15–11:40

Intermediate Charge-Breaking Phases in the 2HDM

Speaker

Dr Christoph Borschensky

11:40

12:00

Higgs: theory and experiment

Session | Location: Sala Azul

12:00–12:20

Combined Higgs boson measurements and their interpretations with the ATLAS experiment

Speaker

Rui Zhang

12:20–12:40

Exploring correlations between HEFT Higgs couplings κ_V and κ_{2V} via HH production at e^+e^- colliders

Speaker

Juan Manuel Dávila Illán

12:40–13:00

Analysis of interference effects in the di-top final state for CP-mixed scalars in extended Higgs sectors

Speaker

Romal Kumar

13:10