

## **Session Program**

**18-23 Aug 2025**



## **SUSY 2025**

### ***Higgs theory and experiment***

University of California at Santa Cruz

# Tuesday 19 August

16:30

## Higgs theory and experiment

**Session** | **Location:** UC Santa Cruz, Social Sciences 2: 179 | **Convener:** Valentina Dutta

16:30–16:50 **Resonant Di-Higgs Production at the LHC: Theory vs. Experiment**

**Speaker**

Milada Margarete Mühlleitner

16:50–17:10 **BSM Di-Higgs Production in the RxSM**

**Speaker**

Sven Heinemeyer

17:10–17:30 **HH searches and higgs-self couplings measurements by ATLAS**

**Speaker**

Cecilia Toscari

17:30–17:50 **Di-Higgs searches at CMS**

**Speaker**

Tamas Almos Vami

17:50–18:10

**Searches for resonances decaying into Higgs boson pairs with the ATLAS Experiment**

**Speaker**

Maxwell Cui

18:10–18:30 **Measurement of BSM Triple Higgs Couplings using a Neural Network**

**Speaker**

Sven Heinemeyer

18:30

# Thursday 21 August

14:00

## Higgs theory and experiment

**Session** | **Location:** UC Santa Cruz, Social Sciences 2: 179 | **Convener:** Matthew Klein

14:00–14:20 **Measurements of the Higgs boson mass and width at CMS**

**Speaker**

Badder Marzocchi

14:20–14:40 **Highlights on Higgs measurements with ATLAS**

**Speaker**

Maria Mironova

14:40–15:00 **Constraints on Higgs to heavy flavour couplings**

**Speaker**

Leonardo Giannini

15:00–15:20 **Anomalous couplings and CP properties at CMS**

**Speaker**

Rohith Saradhy

15:20–15:40 .

15:40–16:00 .

16:00

16:30

## Higgs theory and experiment

**Session** | **Location:** UC Santa Cruz, Social Sciences 2: 071 | **Convener:** David Miller

16:30–16:50

**Machine Learning to rescue large pseudoscalar Yukawa couplings in the C3HDM**

**Speaker**

Rafael Filipe Teixeira Boto

16:50–17:10 **Searches for rare Higgs boson processes with the CMS detector**

**Speaker**

Leonardo Giannini

17:10–17:30 **Beyond the Standard Model in the Higgs sector**

**Speaker**

Chris Meyer

17:30–17:50 **Searches for additional Higgs bosons (high & low mass) at CMS**

**Speaker**

Axel Newton Buchot Perraguin

17:50–18:10 .

18:30

18:10-18:30

# Friday 22 August

14:00

## Higgs theory and experiment

**Session** | **Location:** UC Santa Cruz, Social Sciences 2: 071 | **Convener:** Jack Gunion

14:00–14:20

### Prospects for light exotic scalar measurements at the $e^+e^-$ Higgs factory

**Speaker**

Aleksander Zarniecki

14:20–14:40

### Di-Higgs Production in the 2HDM at high-energy $e^+e^-$ Colliders

**Speaker**

Milada Margarete Mühlleitner

14:40–15:00

### The Price of a Large Electron Yukawa

**Speaker**

Duncan Rocha

15:00–15:20

### Higgs Boson Production at $\mu^+ \mu^-$ Colliders

**Speaker**

Lukas Treuer

15:20–15:40

### BSM Triple Higgs Couplings at a Future Muon Collider

**Speaker**

Sven Heinemeyer

15:40–16:00

### CP-violation in the complex singlet extension of 2HDM

**Speaker**

Dr Jayita Lahiri

16:00