

## **Session Program**

**9-10 Oct 2025**

# **Fall Workshop of the RTG 2044**

## ***Poster Session***

AP Building, Lecture Hall 01 007  
Hermann-Herder-Str. 6, 79104 Freiburg

# Thursday 9 October

16:30

## Poster Session

**Session** | **Location:** Physics Highrise, Foyer, Physics Highrise, Foyer

16:30–16:31

### Theoretical predictions for tau-pair production in ultraperipheral heavy-ion collisions

**Speaker**

Jose Luis Hernando Ariza

16:31–16:32

### Combined measurements of Higgs boson production at the ATLAS experiment

**Speaker**

Ahmed Markhoos

16:32–16:33

### A Digital SiPM in Liquid Xenon

**Speaker**

Tiffany Luce

16:33–16:34

### Search for Di-Higgs Production in the $HH \rightarrow \tau\tau$ Channel with the ATLAS Detector $t\bar{t}$ Fake- $\tau_{\text{had}}\tau_{\text{had}}$ Background Estimation and GNN Optimisation

**Speaker**

Baktash Amini

16:34–16:35

### Towards an Electroweak Parton Shower

**Speaker**

Jo Reimer

16:35–16:36

### Renormalization of the general Two-Higgs-Doublet Model

**Speaker**

Robin Feser

16:36–16:37

### Test Beam Analysis of Irradiated CMOS Strip Sensors

**Speaker**

Fabian Simon Lex

16:37–16:38

### Construction and investigation of optimal observables for testing CP invariance in the decay $H \rightarrow \tau^+\tau^-$ at the LHC

**Speaker**

Yann Robert Stoll

16:38–16:39

### Tau identification with graph neural networks in ATLAS

**Speaker**

Pim Bijl

16:39-16:40

**Fast Timing with 3D Silicon Sensors**

**Speaker**

Iveta Zatocilova

16:40-16:41

**Precision predictions of partial decay widths in the general Two-Higgs-Doublet Model**

**Speaker**

Jose Hernandez

16:41-16:42

**Integrating out a Heavy Higgs Singlet - When SMEFT is not Enough**

**Speaker**

Sebastian Schuhmacher

18:00