## **Session Program**

Sep 15 - 19, 2025



# Unraveling the New Standard Model Presentations and Discussion

Faculdade de Ciências da Universidade de Lisboa Campo Grande 016, 1749-016 Lisboa

### Mon, September 15

9:30 AM **Presentations and Discussion: Session 1** Session | Location: Faculdade de Ciências da Universidade de Lisboa, Campo Grande 016, 1749-016 Lisboa 09:30 - 10:15 DM Relic Density al NLO QCD in the 2->3 Channel Speaker Pavao Brica 10:15 - 11:00 Vector Dark Matter Model under Phenomenological Investigations Speaker Karim Elyaouti 11:00 AM 11:30 AM **Presentations and Discussion: Session 2** Session | Location: Faculdade de Ciências da Universidade de Lisboa, Campo Grande 016, 1749-016 Lisboa 11:30 - 12:15 RelExt - A New Code for Automatic Relic Density Calculations Speaker Rodrigo Capucha 12:15 - 13:00 Two-component scalar Dark Matter Speaker Maria Gonçalves 1:00 PM

### Tue, September 16

9:00 AM **Presentations and Discussion: Session 3** Session | Location: Faculdade de Ciências da Universidade de Lisboa, Campo Grande 016, 1749-016 Lisboa 09:00 - 09:45 New Physics Effects via Higgs Effective Field Theory Speaker Anisha . 09:45 - 10:30 Phenomenological aspects of the SMEFT in Higgs physics Speaker Stefano Di Noi 10:30 AM 11:00 AM **Presentations and Discussion: Session 4** Session | Location: Faculdade de Ciências da Universidade de Lisboa, Campo Grande 016, 1749-016 Lisboa 11:00 - 11:45 Background Simulation of Higgs Pair Production in BSM Models Speaker Maurice Schüßler 11:45 - 12:30 Higgs mass predictions in the CP-violating high-scale NMSSM Speaker Christoph Borschensky 12:30 PM

### Wed, September 17

9:00 AM **Presentations and Discussion: Session 5** Session | Location: Faculdade de Ciências da Universidade de Lisboa, Campo Grande 016, 1749-016 Lisboa 09:00 - 09:45 Top-Yukawa-induced corrections to Higgs pair production Speaker Sauro Carlotti 09:45 - 10:30 The role of QCD corrections in the electron EDM Speaker **Duarte Fontes** 10:30 AM 11:00 AM **Presentations and Discussion: Session 6** Session | Location: Faculdade de Ciências da Universidade de Lisboa, Campo Grande 016, 1749-016 Lisboa 11:00 - 11:45 Phase Transitions in Extensions of the SM Speaker Gabriel Lourenço 11:45 - 12:30 Charged Domain Walls in the 2HDM Speaker Daniel Neacsu 12:30 PM

### Thu, September 18

9:00 AM **Presentations and Discussion: Session 7** Session | Location: Faculdade de Ciências da Universidade de Lisboa, Campo Grande 016, 1749-016 Lisboa 09:00 - 09:45 Improving thermal WIMPs Speaker André Milagre 09:45 - 10:30 Probing the early Universe with BSMPT v3 Speaker João Viana 10:30 AM 11:00 AM **Presentations and Discussion: Session 8** Session | Location: Faculdade de Ciências da Universidade de Lisboa, Campo Grande 016, 1749-016 Lisboa 11:00 - 11:45 NLO corrections to DM relic density in the CxSM Speaker Pedro Gabriel 11:45 - 12:30 Multi Singlet Scalar Dark Matter Extensions of the Standard Model Speaker Tomás Trindade Henriques 12:30 PM

### Fri, September 19

9:00 AM **Presentations and Discussion: Session 9** Session | Location: Faculdade de Ciências da Universidade de Lisboa, Campo Grande 016, 1749-016 Lisboa 09:00 - 09:45 Searching for vector dark matter in a minimal model Speaker Guilherme Monsanto 09:45 - 10:30 Black holes and early universe phase transitions Speaker Jens Boos 10:30 AM 11:00 AM **Presentations and Discussion: Session 10** Session | Location: Faculdade de Ciências da Universidade de Lisboa, Campo Grande 016, 1749-016 Lisboa 11:00 - 11:45 Higgs Pair Production at Future Colliders Speaker Milada Margarete Mühlleitner 11:45 - 12:30 CP-violation and dark sectors Speaker Rui Santos 12:30 PM