

Session Program

22 April 2022

MAP-Fis Essays Workshop

MAP-Fis Essays Presentations

Zoom Video Conference Room
Zoom Video Conference Room

Friday 22 April

08:30

MAP-Fis Essays Presentations

Session | **Location:** Zoom Video Conference Room, Zoom Video Conference Room

08:30–08:50

Multifunctional magnetic nanostructures for cancer theragnosis

Speaker

Sofia Caspani

08:50–09:10

Controlling hidden quantum phases towards dynamical multiferroicity through nonlinear phononics

Speaker

Mariana Gomes

09:10–09:30

Causality in Lorentzian CFTs

Speaker

João Miguel Araújo Vilas Boas

09:30–09:50

Design of Ruddlesden-Popper layered structures for efficient energy materials

Speaker

Ricardo Manuel Alves Pacheco Moreira

09:50–10:10

Multiplex detection of circulating tumor DNA using graphene electrolyte-gate field-effect transistors.

Speaker

Telma Campos Domingues

10:15

13:15

MAP-Fis Essays Presentations

Session | **Location:** Zoom Video Conference Room, Zoom Video Conference Room

13:15–13:35

Towards ultrafast and ultra-compact lasers: uncovering ultrashort pulse generation mechanisms in semiconductor lasers with novel characterization approaches

Speaker

Tiago dos Santos Gomes

13:35–13:55

Searching for dark matter with the ATLAS detector using unconventional signatures

Speaker

Maura Barros

13:55–14:15

Astrophysical and Local Tests of the Einstein Equivalence Principle

Speaker

João Diogo de Freitas Dias

14:35

14:15-14:35

Black hole shadows, the Kerr hypothesis and fundamental physics**Speaker**

Ivo Sengo

14:55

MAP-Fis Essays Presentations**Session** | **Location:** Zoom Video Conference Room, Zoom Video Conference Room

14:55-15:15

Competing and Coevolving Contagions on Complex Networks**Speaker**

Guilherme Machado

15:15-15:35

Collider, neutrino and dark relics of Grand Unification with Deep Learning**Speaker**

João Pedro Pino Gonçalves

15:35-15:55

Identifying Root Causes in Dependency Network Models of Assembly Lines**Speaker**

Filipe Costa Real Barroso

15:55