

Session Program

6 May 2022

MAP-Fis Essays Workshop

MAP-Fis Essays Presentations

Zoom Video Conference Room
Zoom Video Conference Room

Friday 6 May

09:30

MAP-Fis Essays Presentations

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

09:30–09:50

Surface spins for quantum advantage

Speaker

Yelko del Castillo Hernández

09:50–10:10

Networking topological insulator Hamiltonians and its Relevance to quantum computation

Speaker

Luisa Madail Pimentel

10:10–10:30

Non-linear dynamics and gravitational wave signatures of bosonic stars

Speaker

Marco Ivan Novais Ribeiro Silva Brito

10:30–10:50

Testing the nature of astrophysical black hole candidates with light and matter probes

Speaker

João Pedro de Araújo Novo

10:50

14:00

MAP-Fis Essays Presentations

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

14:00–14:20

Searching for new particles with astrophysical compact objects

Speaker

Etevaldo dos Santos Costa Filho

14:20–14:40

Application of deep learning networks to GW Astronomy

Speaker

Osvaldo Freitas

14:40–15:00

Correlation of structural and transport properties of Bi₂Se₃ and Graphene as a function of CVD growth parameters for photodetector applications

Speaker

James Caleb Peters

15:00–15:20

Characterization of single-photon emitting defects in 2D materials by scanning Probe microscopy

Speaker

Elmahdi Amar

15:20

15:40

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

15:40-16:00

Development of an optimized system for wind energy prediction in Portugal**Speaker**

Joana Alexandra Basílio Martins

16:00-16:20

Enhanced Searches with the Pierre Auger Observatory in the Era of Multi-messenger Astrophysics**Speaker**

Maria Alexandra Lima Fernandes

16:20