

Session Program

6 December 2023

**MAP-Fis PhD Students Assessment -
University of Minho**

***MAP-Fis PhD Students Assessment
Presentations***

Anfiteatro de Física of the University of Minho in Gualtar.

Wednesday 6 December

10:10

MAP-Fis PhD Students Assessment Presentations

Session | **Location:** Anfiteatro de Física of the University of Minho in Gualtar.

10:10-10:35

Investigação de efeitos quânticos no transporte de energia e cargas em sistemas fotossintéticos com simulações quânticas (ONLINE talk)

Speaker

José Guimarães

10:35-11:00

Design and construction of a Rangefinder/LiDAR testbed

Speaker

Mr Nelssom Cunha

11:00-11:25

Architectures for scalable quantum photonic computing

Speaker

Anita Camillini

11:25-11:50

Coherence and Contextuality as Quantum Resources

Speaker

Rafael Wagner

11:50-12:15

AutoBSM: Validating Beyond the Standard Model Physics with Machine Learning

Speaker

Fernando Souza

12:15-12:40

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

Speaker

Maria Fernandes

12:40

14:05

MAP-Fis PhD Students Assessment Presentations

Session | **Location:** Anfiteatro de Física of the University of Minho in Gualtar.

14:05-14:30

Application of deep learning networks to GW astronomy (ONLINE talk)

Speaker

Osvaldo Freitas

14:30-14:55

Searching for dark matter with the ATLAS detector using unconventional signatures

Speaker

Maura Teixeira

14:55-15:20

Understanding and overcoming limitations of linear-optical quantum computation

Speaker

Carlos Fernandes

15:20-15:45

Characterization of single-photon emitting defects in 2D materials by scanning probe microscopy (SPED-Probe)

Speaker

Elmahdi Amar

15:45-16:10

Correlation of transport and structural properties of Graphene and Bismuth Telluride as a function CVD growth parameters

Speaker

James Peters

16:10-16:30

Coffee Break

16:30-16:55

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

Speaker

Telma Domingues

16:55-17:20

Single spin resonance magnetometry with scanning tunneling microscopy (ONLINE talk)

Speaker

Yelko Hernández

17:20