

MAP-Fis Essays Workshop

Report of Contributions

Contribution ID: 0

Type: **not specified**

Invited Talk

Presenter: Prof. FREITAS, Paulo (INL)

Contribution ID: 1

Type: **not specified**

Final Remarks

Presenter: Prof. SCHMOOL, David (Universidade do Porto)

Contribution ID: 2

Type: **not specified**

Investigation of quantum effects in the energy and charge transport in photosynthetic systems by means of quantum simulations

Friday 22 April 2022 10:35 (20 minutes)

Supervisor: Mikhail Igorevich Vasilevskiy

Evaluation Panel: Ricardo G Dias

Summary

Presenter: GUIMARÃES, José Diogo da Costa

Session Classification: MAP-Fis Essays Presentations

Contribution ID: 3

Type: **not specified**

Memristors based on 2D MXenes for photonic neuromorphic computing

Friday 22 April 2022 10:55 (20 minutes)

Supervisor: João Ventura

Evaluation Panel: Bernardo Almeida & Paulo Marques

Summary

Presenter: TEIXEIRA, Henrique

Session Classification: MAP-Fis Essays Presentations

Contribution ID: 5

Type: **not specified**

Palestra 3/Talk 3

Contribution ID: **10**

Type: **not specified**

Welcome

Friday 22 April 2022 08:20 (10 minutes)

Summary

Presenter: Prof. LOPES DOS SANTOS, João (Universidde do Porto)

Session Classification: Opening Session

Contribution ID: **13**

Type: **not specified**

Multifunctional magnetic nanostructures for cancer theragnosis

Friday 22 April 2022 08:30 (20 minutes)

Supervisor: Célia Tavares de Sousa

Evaluation Panel: Victor Amaral & João Pedro Alpuim

Summary

Presenter: CASPANI, Sofia

Session Classification: MAP-Fis Essays Presentations

Contribution ID: 15

Type: **not specified**

Design of Ruddlesden-Popper layered structures for efficient energy materials

Friday 22 April 2022 09:30 (20 minutes)

Supervisor: Estelina Silva

Evaluation Panel: Victor Amaral & Eduardo Castro

Summary

Presenter: PACHECO MOREIRA, Ricardo Manuel Alves

Session Classification: MAP-Fis Essays Presentations

Contribution ID: **16**

Type: **not specified**

Hematite nanowires for solar water splitting: development and structure optimization

Presenter: Dr AZEVEDO, João (Universidade do Porto)

Contribution ID: 17

Type: **not specified**

Causality in Lorentzian CFTs

Friday 22 April 2022 09:10 (20 minutes)

Supervisor: Miguel Costa

Evaluation Panel: A Onofre

Summary

Presenter: VILAS BOAS, João Miguel Araújo

Session Classification: MAP-Fis Essays Presentations

Contribution ID: **19**

Type: **not specified**

Exchange coupled donor dimers in nanocrystal quantum dots

Presenter: Dr ALMEIDA, António José (Universidade de Aveiro)

Contribution ID: 20

Type: **not specified**

Palestra de Introdução/Overview Talk

Contribution ID: **21**

Type: **not specified**

Palestra 1/Talk 1

Contribution ID: 22

Type: **not specified**

Palestra 2/Talk 2

Contribution ID: 28

Type: **not specified**

Controlling hidden quantum phases towards dynamical multiferroicity through nonlinear phononics

Friday 22 April 2022 08:50 (20 minutes)

Supervisor: Joaquim Agostinho Moreira

Evaluation Panel: Bernardo Almeida & Bruno Amorim

Summary

Presenter: GOMES, Mariana

Session Classification: MAP-Fis Essays Presentations

Contribution ID: 32

Type: **not specified**

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

Friday 22 April 2022 09:50 (20 minutes)

Supervisor: João Pedro Alpuim

Evaluation Panel: Célia Sousa

Summary

Presenter: DOMINGUES, Telma Campos

Session Classification: MAP-Fis Essays Presentations

Contribution ID: 33

Type: **not specified**

Developments of Alternative Methods for the Measurements of Beam Quality in the Light Detection and Ranging -LIDAR

Friday 22 April 2022 11:15 (20 minutes)

Supervisor: José Carlos Viana Gomes

Evaluation Panel: Manuel B. Marques

Summary

Presenter: CUNHA, Nelssom Fernandez da

Session Classification: MAP-Fis Essays Presentations

Contribution ID: 34

Type: **not specified**

Optimizing Models of Hybrid Quantum-Classical Computation

Friday 22 April 2022 11:35 (20 minutes)

Supervisor: Ernesto Galvão

Evaluation Panel: Ariel Guerreiro & Gareth Baxter

Summary

Presenter: REIS PERES, Filipa Cavaco

Session Classification: MAP-Fis Essays Presentations

Contribution ID: 35

Type: **not specified**

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

Friday 22 April 2022 13:15 (20 minutes)

Supervisor: Helder Manuel Paiva Rebelo Cerejo Crespo

Evaluation Panel: Mário Ferreira & José Carlos Viana Gomes

Presenter: GOMES, Tiago dos Santos

Session Classification: MAP-Fis Essays Presentations

Contribution ID: 36

Type: **not specified**

Searching for dark matter with the ATLAS detector using unconventional signatures

Friday 22 April 2022 13:35 (20 minutes)

Supervisor: Nuno Castro

Evaluation Panel: António P. Morais & Miguel Costa

Presenter: BARROS, Maura

Session Classification: MAP-Fis Essays Presentations

Contribution ID: 37

Type: **not specified**

Astrophysical and Local Tests of the Einstein Equivalence Principle

Friday 22 April 2022 13:55 (20 minutes)

Supervisor: Carlos Martins

Evaluation Panel: Carlos Herdeiro & Orfeu Bertolami

Presenter: FREITAS DIAS, João Diogo de

Session Classification: MAP-Fis Essays Presentations

Contribution ID: **38**

Type: **not specified**

Black hole shadows, the Kerr hypothesis and fundamental physics

Friday 22 April 2022 14:15 (20 minutes)

Supervisor: Carlos Herdeiro

Evaluation Panel: Vasco Gonçalves & Orfeu Bertolami

Presenter: SENGO, Ivo

Session Classification: MAP-Fis Essays Presentations

Contribution ID: 39

Type: **not specified**

Competing and Coevolving Contagions on Complex Networks

Friday 22 April 2022 14:55 (20 minutes)

Supervisor: Gareth Baxter

Evaluation Panel: Antonio Luis Ferreira & João Lopes dos Santos

Presenter: MACHADO, Guilherme

Session Classification: MAP-Fis Essays Presentations

Contribution ID: 40

Type: **not specified**

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

Friday 22 April 2022 15:15 (20 minutes)

Supervisor: António P. Morais

Evaluation Panel: Nuno Castro & A Onofre

Presenter: PINO GONÇALVES, João Pedro

Session Classification: MAP-Fis Essays Presentations

Contribution ID: 41

Type: **not specified**

Identifying Root Causes in Dependency Network Models of Assembly Lines

Friday 22 April 2022 15:35 (20 minutes)

Supervisor: Gareth Baxter

Evaluation Panel: J Viana Lopes & Antonio Luís Ferreira

Presenter: REAL BARROSO, Filipe Costa

Session Classification: MAP-Fis Essays Presentations