

MAP – Fis PhD Research Conference Program

18/ Jan/2013 – Department of Physics, University of Aveiro

Program

09:30 – Opening session: Welcome

Optics and Photonics

09:45 – José Luis Santos (UP) “New Paths in Optical Sensing”

10:15 – C. S. Gonçalves “Study of the demagnetization dynamic in magnetic films using pump-probe with temporal resolution in the 6 femtosecond range”

10:30 – Miguel N Canhota “Progress in the simulation and experimental realization of ultrashort light pulse generation by cascaded four-wave mixing”

10:45 – Poster session (Coffee Break)

Meteorology & Oceanography

11:30 – Alfredo Rocha (UA) “Numerical simulation of weather and climate”

12:00 – Ana Picado “Upwelling and rivers discharge effects on chlorophyll production along the NW coast of the Iberian Peninsula”

Gravitation, Cosmology & Particle Physics

12:15 – Orfeu Bertolami (UP) “On the road and some scalar field avenues”

12:45 – Lunch

Statistical Physics & Complex Networks

14:30 – Sergey Dorogovtsev (UA) “The complex networks quest”

15:00 – M. A. Lopes “Emergence of brain waves as a dynamical phase transition”

15:15 – J M G Sousa “Monte Carlo study of the phase diagram of C60”

15:30 – R A da Costa “A toy-model for flow optimization”

15:45 – Posters (Coffee Break)

Condensed Matter & Advanced Materials

16:30 – Mikhail Vasilevskiy (UM) “Collective effects in absorption and emission of light in ensembles of nanocrystal quantum dots”

17:00 – J Nunes-Pereira “Porous composite membranes based on poly(vinylidene fluoride-trifluoroethylene) for Li-ion battery applications”

17:15 – P Martins “Advancements in PVDF based magnetoelectric nanocomposites”

17:30 – J G Barbosa “Electrophoretic Deposition of CoFe₂O₄ nanograins dispersed in a BaTiO₃ matrix

17:45 – D J Silva “Influence of the doping on the preferred sites of Fe and Ni in silicon”

18:00 – J N B Rodrigues “Scattering by periodic defect lines in graphene”

18:15 – Final Remarks

Poster sessions

J P Araque

Search for vector-like quark production with the ATLAS detector.

Mengjie Wang

Hawking radiation for a charged Proca field

Sandra Correia

Organic-inorganic hybrid materials for luminescent solar concentrators

Clarisse Ribeiro

PVDF And PLLA Membranes For Tissue Engineering Applications

Ana Luísa Silva

X-ray imaging detector based on a 2D sensitive THCOBRA with resistive line readout

António José de Almeida

Ferromagnetic resonance of intrinsic CdSe quantum dots

Arlete Apolinario

Anodic fast-growth of highly ordered hexagonal arrays of TiO₂ nanotubes by a single anodization step

Armando Ferreira

Electromechanical response of carbon nanotube / poly(vinylidene fluoride) composites and its application to the limb/prosthesis pressure mapping

Daniel Mota

Order parameter coupling in La_{0.7}Sr_{0.3}MnO₃ thin films epitaxially grown on SrTiO₃

Gonçalo Oliveira

Dynamic off-centering of Cr³⁺ ions and short-range magneto-electric clusters in CdCr₂S₄.

Isabel Gomes

Pr_{0.5}Ca_{0.5}MnO₃ thin films on LinNbO₃ substrates

Luís Guerra

Nonvolatile Resistive Switching In Ta-TaOx-Ta Memristive Devices

Marcelo Barbosa

The Study Of Thin Films And Nanostructures At Atomic Scale Using Exotic Nuclear Methods

Rita Rodrigues

Magnetoliposomes Based On Nickel/Silica Core/Shell Nanoparticles

Vanessa Fernandes Cardoso

Efficiency Improvement Of Microfluidic System Using Acoustic Streaming Phenomenon Based On Piezoelectric P(Vdf-Trfe) Copolymer

Vânia Freitas

Luminescent Urea Cross-Linked Tripodal Siloxane-Based Hybrids

Carina Lopes

Influence Of Morphological Changes In A Lagoon Flooding Extension: Case Study Of Ria De Aveiro (Portugal)

Angela Costa

A Bulk Optical Current Sensor For Metering And Protection Applications In High Voltage Line

Carlos de Jesus

Optical Sensors For Dissolved Co2 Determation In Aquaculture Applications

Hugo Martins

Sensor De Vibrações Usando Laser De Raman E Redes De Bragg Em Fibra Interrogado Em Potência

Marta Ferreira

Interferómetros Em Fibra Óptica

Raquel Querós

A Label-Free Dna Aptamer-Based Lpg Biosensor For The Detection Of E. Coli Outer Membrane Proteins

Ricardo André

High-Birefringence Sagnac Interferometer Based On Suspended Core Fiber

Rita Ribeiro

Fiber Optical Tweezers: Computational Models

Ivo Nascimento

Theoretical Analysis Of Magneto Optical Current Sensors For Hipower Systems