

**SCIENTIFIC PROGRAM OF THE CDT IN PHYSICS DOCTORAL MEETING**

Salón de Grados, Facultad de Ciencias de Granada

Lectures to be delivered in English

**MONDAY 12th**

8:30-9:15	<b>Registration</b>	
9:15-9:30	<b>Welcome</b>	Prof. M.C. Carrión, Dean of the School of Sciences
9:30-10:00		<b>Keynote Lecture: The Tordesillas College in Physics</b>
	<b>Session 1 (Chair: A. Moro)</b>	
10:00-10:30	A. Kappes	Hadron, particle and astroparticle physics in Muenster
10:30-10:50	J. Berrocal	A novel detection method for fundamental physics experiments: from the classical to the quantum regime
10:50-11:10	J. R. Borges	Theoretical considerations about heavy-ion fusion in potential scattering
11:10-11:40	<b>Coffee Break</b>	
	<b>Session 2 (Chair: A. Kappes)</b>	
11:40-12:10	A. Domínguez	An overview of the medical physics research at US and CNA: Dosimetry, Radiobiology, and Protontherapy
12:10-12:30	M. Lora	Actinides measurements by Accelerator Mass Spectrometry at the CNA
12:30-12:50	P. Torres Sánchez	Measurement of neutron induced nuclear reactions at n_tof (CERN) for medical applications
12:50-13:10	N. Rodríguez Santiago	Electronics challenges beyond the Moore's domain
13:10-13:30	F. Nahuel Bandi	Single Photon Detection: From Photomultiplier Tubes to Silicon Photomultiplier
13:30-13:50	M. Donath	Nanophysics in Muenster (Exp.)
13:50-14:10	M. Rohlfing	Nanophysics in Muenster - Theory
14:10-16:00	<b>Lunch</b>	
	<b>Session 3 (Chair: A. Latge)</b>	
16:00-16:30	J. Rachid Mohallem	The graduate program in Physics at UFMG
16:30-16:50	L. Andrade	Platforms for biomedical application based on nanomaterials
16:50-17:10	D. Nanclares	Structural and luminescent properties of Layered Double Hydroxides nanotubes
17:10-17:30	A. Toral	Simulation and modeling of nanoelectronic devices based on 2D materials
17:30-17:50	S. Mendes de Vasconcelos	Accurate electronic band gap of diamondol and bonitrol from GW calculations
17:50-18:10	M. Anguiano	Shell closure at N=34 and the <sup>48</sup> Si nucleus
18:10-19:00	<b>Visit to Ion-Trap and Lasers Laboratory (Facultad de Ciencias. Host: Prof. Daniel Rodriguez Rubiales)</b>	

**TUESDAY 13th**

	<b>Session 4 (Chair:A. Nunes)</b>	
8:30-9:00	M. Tabanicks	Trends and applications of Ion Beam Analysis
9:00-9:20	A. Latge	Changing electronic and transport properties of graphene based materials by strain
9:20-9:40	F. Alves Pereira	Ideology and Distrust: How Polarization Emerges in Society
9:40-10:00	T. Koch	Multiscale modelling of organic solar cells
10:00-10:20	K. Spangenberg	TEM in-situ investigation of relaxation and dynamics in amorphous FeNiP nanorods
10:20-10:40	C. Plata	From proteins to grains: the power of simple modeling.
10:40-11:00	A. Nunes	Dynamical Segregation in Colloidal Mixtures
11:00-11:30	<b>Coffee break</b>	
12:00-13:00	<b>Presentations of Tordesillas Doctoral Schools for Rectors (Hospital Real)</b>	
14:00-16:00	<b>Lunch</b>	
	<b>Session 5: (Chair: M. Tabanicks)</b>	
16:00-16:30	U. Thiele	Non-linear physics at WWU Munster
16:30-16:50	P.F. Ibáñez Ibáñez	Surface for anti-icing performance and easy ice-detachment
16:50-17:10	Y. Yang	Soft particles monolayers in an air-water interface
17:10-17:30	L.Pérez Mas	Molecular encapsulation by nanogels: A simulation study
17:30-17:50	A.M. Lallena	Ant colony algorithm for driving variance reduction techniques in Monte Carlo simulations of radiation transport
18:00	<b>Farewell</b>	