

Eighth Workshop

New Challenges in Quantum Mechanics: Integrability, Supersymmetry and Quantum Technologies

Thursday June 24, 2021

AULA MAGNA, Faculty of Sciences, University of Valladolid

TIMETABLE

9:00	The Rector of the U. of Valladolid & The Head of the Maths Institute & The Head of the Theoretical Phys Dept	Reception and Opening
9:20	J.M. Mateos Guilarte (USal)	A glimpse at the anomalous magnetic moment of planar electrons
9:40	M.A. del Olmo (UVa)	Groups, Special Functions and Rigged Hilbert Spaces
10:00	M.A. González León (USal)	On the separability of the Neumann system and related problems
10:20	M. Gadella (UVa)	Rigged Hilbert Spaces as a general framework including special functions, Lie algebras of continuous operators and discrete and continuous basis
10:40	F. Mercati (UBu)	Poincaré-invariant Braided Noncommutative Quantum Field Theory
11:00	M. Santander (UVa)	¿Podemos aprender aun algo nuevo de la gravitación newtoniana?: Donde Riemann encuentra a Cayley-Klein

Coffee Break (11:20–11:40)

11:40	L. Santamaría-Sanz (UVa)	Efecto Casimir a temperatura finita con condiciones de contorno generales
12:00	M. Donaire (UVa)	PT-symmetry breaking: Enantio-selectivity of electron paramagnetic resonance
12:20	I. Gutiérrez-Sagredo (UBu)	Generalized Hamiltonian formalism for epidemiological models I
12:40	A. Blasco (UBu)	Generalized Hamiltonian formalism for epidemiological models II: examples, exact solutions and integrable deformations
13:00	F. Buitrago (UVa)	Low surface brightness as the last frontier for galaxy formation and evolution
13:20	J.F. Sanz-Requena (UVa&UEMC)	Atmosferas Planetarias: Transporte radiativo en gigantes gaseosos

Lunch (13:40–16:00)

16:00	A. Alonso (USal)	Scattering between kinks, wobbling kinks and multi-component kinks
16:20	M. Tello (UVa)	Vortex formation in a Ginzburg-Landau theory
16:40	J.M. Queiruga (UVa)	Internal Excitations of Global Vortices
17:00	D. Sáez (UVa)	Deflection of light rays around ultra-compact objects: shadows shapes
17:20	C. Romaniega (UVa)	Casimir energy for concentric δ - δ' spheres

Coffee Break (17:40–18:00)

18:00	J. Sánchez-Cánovas (UVa)	Dipole forces on a binary system of atoms
18:20	C. San Millán (UVa)	SUSY partners de las extensiones autoadjuntas del pozo de potencial
18:40	A. Martín-Mozo (UVa)	Un modelo de potencial nuclear utilizando potenciales de contacto
19:00	D. Gómez-Aguado (UVa)	Automated design of quantum evolutions with linear optical devices
19:20	L.M. Nieto (UVa)	Closing session



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