

Thursday, January 21st

Chair	Hour	Speaker	Title
	09:00 – 09:20		<i>Registration</i>
	09:20 – 10:00		<i>Welcome address</i>
Víctor Morón	10:00 – 10:20	Juan José Serrano-Pérez	Phototherapy with Furocoumarins: A Quantum-Chemical Study
	10:20 – 10:40	Pablo G. Jambrina	Dynamics of the $H^+ + D_2$ reaction. A comparative study
	10:40 – 11:10		<i>Coffee break</i>
Arnau Riera	11:10 – 11:30	David Mateo Valderrama	Evolution of excited electron bubbles in liquid 4He
	11:30 – 11:50	Riccardo Rota	Path Integral Montecarlo simulations of helium-4 at zero temperature
	11:50 – 12:10	Albert Benseny Cases	Coherent manipulation of holes in dipole trap arrays
	12:10 – 12:30	Robert Sewell	Atom chip BEC interferometer
	12:30 – 12:50	Beatriz Olmos Sánchez	Creating collective many-body states with highly excited atoms
	12:50 – 13:10	Octavi Boada	Simulating gauge theories with cold atoms
	13:10 – 15:00		<i>Lunch</i>
Antoni Aguilar	15:00 – 15:20	Gregory Gitzinger	Femtosecond studies of the photodissociation of CH_3I via the B band
	15:20 – 15:40	Diego Herráez Aguilar	QCT and QM study of the $Br + H_2$ reaction
	15:40 – 16:00	Juan José Nogueira Pérez	Desarrollo de potenciales analíticos gas-superficie
	16:00 – 16:10		<i>Short break</i>
	16:10 – 16:30	Víctor Morón	Constructing potential energy surfaces for gas-surface reaction with modified shepard interpolation method
	16:30 – 16:50	Marc Moix Teixidor	Methane dissociation on Ni(111): a quantum dynamical study
	16:50 – 17:10	Nicolás Ramos Berdullas	Determinación de las constantes de velocidad térmicas de la disociación del radical acetil
	17:10 – 17:40		<i>Coffee break</i>
David Bote	17:40 – 18:00	Henok Getahun Tefera	Classical calculation of proton collision with ethylene
	18:00 – 18:20	Pablo Maldonado Jiménez	Efectos relativistas en la estructura electrónica atómica
	18:20 – 18:40	Ricardo Pérez de Tudela	Theoretical methods for the study of the Cs_2-He_n cluster
	18:40 – 19:00	Patricia Barragán	A realistic DFT potential energy surface of H_5^+ cluster
	21:00		<i>Dinner</i> ¹

¹Restaurant Flamant, c/Enrique Granados 23 (nearest underground stations: “Universitat” and “Passeig de Gràcia”).

Friday, January 22nd

Chair	Hour	Speaker	Title
Robert Sewell	09:20 – 09:40	Marina Mele	Spinor Bose-Einstein condensates in a double well trap: population transfer and Josephson oscillations
	09:40 – 10:00	Ulrich Ebling	Fermionic Spinor Dynamics
	10:00 – 10:20	Marta Abad Garcia	Dipolar condensates in toroidal traps
	10:20 – 10:40	Arnau Riera Graells	Simulation of the Laughlin wave function in an optical lattice
	<i>10:40 – 11:10</i>		<i>Coffee break</i>
	<i>11:10 – 11:20</i>		<i>Group picture</i>
Juan José Serrano	11:20 – 11:40	Albert Bruix Fusté	DFT+U study of the interaction of Platinum atoms with the (111) surface of Cerium Dioxide
	11:40 – 12:00	Marçal Capdevila	Un nuevo tipo de enlace a larga distancia: enlace entre iones radicales de signo opuesto. Estudio en los polimorfos de [TTF][TCNE].
	12:00 – 12:20	Mireia Segado	Phenalenone, a photosensitizer of singlet molecular oxygen
	12:20 – 12:40	Raul Montero	Real time observation of coherent excitation phenomena
	12:40 – 13:00	Alexandre Zanchet	H ₂ reactivity on gold nanostructures
	<i>13:00 – 15:00</i>		<i>Lunch</i>
Marc Moix	15:00 – 15:20	Jesús Pérez Ríos	Expansiones supersónicas de Oxígeno molecular
	15:20 – 15:40	Andrés Arregui	Roaming dynamics: formaldehyde, acetaldehyde and acetone
	15:40 – 16:00	Jon Imanol Apiñaniz	New insights in laser produced plasmas and plasma-laser coupling mechanisms
	16:00 – 16:20	Antoni Aguilar	Implementation of an algorithm to locate reaction paths using the potential energy as reaction coordinate
	<i>16:20 – 16:30</i>		<i>Short break</i>
Alberto Hernando	16:30 – 16:50	David Bote Paz	Inelastic collisions of fast charged particles with atoms. Derivation of Bethe asymptotic formulas and calculation of shell corrections.
	16:50 – 17:10	Oriol Vilaseca i Vidal	Phase and interface behavior of pure compounds and binary mixtures with soft-SAFT
	17:10 – 17:30	José María Escartín	Semiconductor concentric quantum rings
	<i>17:30 – 18:00</i>		<i>Farewell coffee break</i>