

TENTATIVE PROGRAMME

"ADVANCED TECHNIQUES IN NONLINEAR DYNAMICS"

FEBRUARY 23-27, 2009, PUEBLA, MEXICO

	SPEAKER	TITLE OF THE LECTURE
MONDAY		
9:20-9:40	WELCOME ADDRESS	
9:40-10:20	Kenneth Showalter, Department of Chemistry, West Virginia University, Morgantown, WV, USA	Population Density Dependent Behavior of Discrete Chemical Oscillators.
10:20-11:00	Hinke Osinga, Department of Engineering Mathematics, University of Bristol, UK	Numerical computation of isochrons.
COFFEE BREAK		
11:40-12:20	Rajarshi Roy, Department of Physics, University of Maryland, College Park, USA	Prediction of High Dimensional Chaotic Dynamics: Application to Nonlinear Photonic Sensor Networks.
12:20-13:00	Bernd Krauskopf, Department of Engineering Mathematics, University of Bristol, UK	Semiconductor lasers subject to optical feedback from two filters.
LUNCH		
16:40-17:20	André Vanderbauwhede, Universiteit Gent, Belgium	Branching of periodic orbits in DNLSE.
17:20-18:00	Ennio Arimondo, Dipartimento di Fisica, Università di Pisa and CNR- INFM, Centro BEC, Università di Trento, Italy.	Coherent control of dressed matter waves.
COFFEE BREAK		

18:40-19:20	Stefan Rotter, Institute for Theoretical Physics, TU, Wien, Austria	Transport through nano-wires with surface roughness.
19:20-20:00	Felix Izrailev, Instituto de Física, Universidad Autónoma de Puebla, Mexico.	Unified approach to localization in correlated bi-layered structures.
TUESDAY		
9:40-10:20	Dirk Roose, Dept. of Computer Science, K.U.Leuven, Belgium.	Multiscale simulation of dynamical systems: accurate initialisation of the microscopic model.
10:20-11:00	Luis Benet , ICF-UNAM, Cuernavaca, Mexico	Structure in narrow rings: The scattering approach.
COFFEE BREAK		
11:40-12:20	Miguel A.F. Sanjuán, Departamento de Física, Universidad Rey Juan Carlos, Madrid, Spain	Controlling Transient Chaos in the presence of noise.
12:20-13:00	Alexander Pisarchik, CIO, León, Mexico.	Interaction between Deterministic and Stochastic Dynamics in Multistable Systems.
LUNCH		
16:40-17:20	Maria Allegrini, Dipartimento di Fisica, Università di Pisa, Italy.	Efficient formation of deeply bound ultracold molecules and manipulation with shaped femtosecond pulses.
17:20-18:00	Indu Satija, Department of Physics and Astronomy, George Mason University and National Institute of Standards & Technology, USA.	BEC Mixture in a Double Well: Two species that may or may not get along.
COFFEE BREAK		
18:40-19:20	Mario Cosenza, Centro de Física Fundamental,	Generalized synchronization in dynamical networks.

	ULA, Mérida, Venezuela.	
19:20-20:00	Jorge Galán. Universidad de Sevilla, Spain.	Continuation of periodic orbits in symmetric Hamiltonian systems; a round-trip from physics to mathematics
WEDNESDAY		
9:40-10:20	James Meiss, Applied Mathematics, University of Colorado, Boulder, USA.	Symmetries and Integrability of Volume Preserving Maps and Flows.
10:20-11:00	Jorge Ize, IIMAS-FENOMECE, UNAM, D.F., Mexico.	Steady solutions of the discrete Sine-Gordon equation on a two dimensional lattice.
COFFEE BREAK		
11:20-12:20	Bart Oldeman, ENCS, Concordia University, Montréal, Canada.	Finding Homoclinic and Heteroclinic Connections to Periodic Orbits in the Restricted Three Body Problem.
12:20-13:00	Ernesto Pérez-Chavela, Departamento de Matemáticas, UAM-Iztapalapa, DF, Mexico.	Some Kind of Periodic Orbits In Celestial Mechanics.
LUNCH		
18:00-20:00	POSTER SESSION	
THURSDAY		
9:40-10:20	Edson Denis Leonel, DEMAC, UNESP, Rio Claro, SP., Brazil.	Phase transition and dynamical properties for one-dimensional Fermi accelerator models: a short review.
10:20-11:00	David P. Sanders, Departamento de Física, Facultad de Ciencias, UNAM, DF, Mexico.	Bifurcations of attractors in pinball billiards.
COFFEE BREAK		
11:40-12:20	Alain Léger, CNRS, Laboratoire de Mécanique	Some theoretical and computational aspects of

	et d'Acoustique, Marseille, France.	nonsmooth dynamics.
12:20-13:00	Ana Amador, Departamento de Física, UBA, Buenos Aires, Argentina .	Nonlinear Dynamics in Birdsong.
LUNCH		
16:40-17:20	Manuel O. Cáceres Centro Atómico Bariloche and Instituto Balseiro, Bariloche, Argentina	The Life-time from Unstable Normal Forms and the First Passage Statistics in the Logistic Model.
17:20-18:00	Raúl Rechtman, Centro de Investigación en Energía, UNAM, Temixco, Mexico.	Chaos and statistical physics.
COFFEE BREAK		
18:40-19:20	Arezky Hernández Rodríguez, UACM, DF, Mexico.	Induced cultural globalization by an external vector field in an enhanced Axelrod model.
FRIDAY		
9:40-10:20	Sebastian Wieczorek, SECaM, Exeter University, U.K.	Modelling spatiotemporal dynamics of coupled lasers: strong and weak-coupling theory.
10:20-11:00	J. A. Mendez-Bermúdez, Instituto de Física, Universidad Autónoma de Puebla, Mexico.	Emergence of intermediate spectral statistics in surface corrugated waveguides
COFFEE BREAK		
11:40-12:20	Rider Jaimes-Reátegui, Centro Universitario de los Lagos, Universidad de Guadalajara, Lagos de Moreno, Mexico.	Experimental approach to a study of complex networks with a single oscillator.
12:20-13:00	Germán Luna-Acosta, Instituto de Física, Universidad Autónoma de Puebla, Mexico.	One-Dimensional photonic Kronig-Penney model with Positional Disorder. Theory and experiment
13:00	CLOSING REMARKS.	