

WORKSHOP PROGRAMME**“ADVANCED COMPUTATIONAL AND EXPERIMENTAL TECHNIQUES
IN NONLINEAR DYNAMICS”****AUGUST 03-14, 2015, CUSCO, PERU**

SUNDAY 02		
ROOM	Hotel San Agustín “Internacional”, Salón de Eventos	
11:00-19:00	REGISTRATION	
19:00-20:00	WELCOME RECEPTION	
MONDAY 03		
ROOM	Hotel San Agustín “El Dorado”, Salón de Eventos	
8:00-10:30	REGISTRATION	
ROOM	Paraninfo of UNSAAC (Auditorio Principal)	
11:00-11:30	WELCOME ADDRESS AND OPENING	
	SPEAKER	TITLE OF THE LECTURE
CHAIR	Cristina Masoller	
11:30-12:00	ANTONIO POLITI The Institute for Complex Systems and Mathematical Biology - Old Aberdeen, UK	COLLECTIVE DYNAMICS IN GLOBALLY COUPLED OSCILLATORS
12:00-12:30	INDUBALA I SATIJA George Mason University, Fairfax, VA, USA	KISS PRECISE AND PRECISE QUANTIZATION REINCARNATION OF AN APOLLONIAN GASKET IN A QUANTUM FRACTAL
LUNCH		
ROOM	Hotel San Agustín “El Dorado”, Salón de Eventos	
CHAIR	Bernd Krauskopf	
17:00-17:30	CRISTINA MASOLLER Universitat Politecnica de Catalunya, Terrassa, Barcelona, Spain	SYMBOLIC PATTERNS, CLUSTERS AND HIERARCHIES IN SPIKING SYSTEMS

17:30-18:00	DIMITRIS SYVRIDIS National and Kapodistrian University of Athens, Panepistimiopolis, Ilisia, Greece	EXPERIMENTAL INVESTIGATION OF COUPLED SEMICONDUCTOR LASER NETWORKS
COFFEE BREAK		
CHAIR	VÍCTOR F. BREÑA MEDINA	
18:30-19:00	PABLO AGUIRRE Universidad Técnica Federico Santa María, Valparaíso, Chile	GLOBAL MANIFOLDS ORGANISING EXCITABLE BEHAVIOUR IN A LASER SYSTEM
19:00-19:30	HINKE OSINGA University of Auckland, New Zealand	THE CODIMENSION OF PSEUDO-PLATEAU BURSTING
TUESDAY 04		
ROOM	Hotel San Agustín "El Dorado", Salón de Eventos	
CHAIR	DESIDERIO VÁSQUEZ	
10:00-10:30	EDGAR KNOBLOCH University of California at Berkeley, USA	LOCALIZED STATES IN PERIODICALLY FORCED SYSTEMS
10:30-11:00	ROUSLAN KRECHETNIKOV University of Alberta, Edmonton, Canada	ON THE ORIGIN AND NATURE OF FINITE-AMPLITUDE INSTABILITIES IN PHYSICAL SYSTEMS
COFFEE BREAK		
CHAIR	PABLO AGUIRRE	
11:30-12:00	VÍCTOR F. BREÑA MEDINA UNAM, campus Morelia, Michoacán, México	STRIPE TO SPOT TRANSITION IN A PLANT ROOT HAIR INITIATION MODEL
12:00-12:30	JUAN SÁNCHEZ UMBRÍA Universitat Politècnica de Catalunya, Barcelona, Spain	CONTINUATION OF BIFURCATIONS OF CYCLES IN DISSIPATIVE PDES

12:30-13:00	DESIDERIO VÁSQUEZ Pontificia Universidad Católica del Perú (PUCP), Lima, Perú	SURFACE TENSION AND THERMAL EFFECTS ON PROPAGATING REACTION FRONTS.
LUNCH		
CHAIR	Antonio Politi	
17:00-17:30	TOMASZ KAPITANIAK Politechnika Łódzka Lodz University of Technology, Poland	PERPETUAL POINTS AND HIDDEN ATTRACTORS IN DYNAMICAL SYSTEMS
17:30-18:00	JOSHUA PROCTOR Institute for Disease Modeling, Bellevue, WA, USA.	ON DISCOVERING COHERENT SPATIAL-TEMPORAL MODES FROM HIGH-DIMENSIONAL MEASUREMENT DATA ARISING FROM COMPLEX SYSTEMS FOR THE PURPOSE OF CONTROL: SPECIAL EMPHASIS ON INFECTIOUS DISEASE APPLICATIONS
18:00-18:30	MAXI SAN MIGUEL IFISC (CSIC-UIB), Campus Universitat Illes Balears, Palma de Mallorca, Spain	NETWORK FRAGMENTATION TRANSITIONS: THE VOTER MODEL
20:00	CONFERENCE DINNER	
WEDNESDAY 05		
ROOM	Hotel San Agustín "El Dorado", Salón de Eventos	
CHAIR	EDSON D. LEONEL	
10:00-10:30	JÜRGEN KURTHS Humboldt-Universität zu Berlin, Universität Potsdam, Germany	QUANTIFYING STABILITY IN COMPLEX NETWORKS: FROM LINEAR TO BASIN STABILITY

10:30-11:00	ELBERT MACAU Instituto Nacional de Pesquisas Espaciais, São Jose dos Campos, Brazil.	PATTERN RECOGNITION IN A NEW KURAMOTO---TYPE OF NETWORK AND ITS EXPERIMENTAL COMPARISON WITH THE HUMAN PERFORMANCE
COFFEE BREAK		
CHAIR	SEBASTIAN WIECZOREK	
11:30-12:00	SVETLANA GUREVICH Westfälische Wilhelms-Universität Münster, Germany	TIME-DELAYED FEEDBACK CONTROL OF SELF-ORGANIZED STRUCTURES IN DISSIPATIVE SYSTEMS
12:00-12:30	EMANUEL HENN IFSC- University of S. Paulo São Carlos – SP - Brazil	EXCITING BOSE-CONDENSATE USING OSCILLATORY FIELDS: OBSERVATION OF TURBULENCE, GRANULATION AND OTHER EFFECTS
LUNCH		
FREE AFTERNOON: Guided tour to CHINCHEROS and MORAY at 14:00		
THURSDAY 06		
ROOM	Hotel San Agustín “El Dorado”, Salón de Eventos	
CHAIR	KRASIMIRA TSANEVA-ATANASOVA	
10:00-10:30	BERND KRAUSKOPF University of Auckland, New Zealand	ISOCHRONES: THEIR COMPUTATION, THEORY AND APPLICATIONS
10:30-11:00	MARIAN WIERCIGROCH Centre for Applied Dynamics Research, University of Aberdeen, UK	COMPLEX DYNAMICS OF IMPACT OSCILLATORS: THEORY AND EXPERIMENTS
COFFEE BREAK		

CHAIR	HINKE OSINGA	
11:30-12:00	ANDRZEJ STEFAŃSKI Lodz University of Technology, Stefanowskiego, Lodz, Poland	DYNAMICS AND SYNCHRONIZATION OF COUPLED SELF INDUCED DRY FRICTION OSCILLATORS
12:00-12:30	KRASIMIRA TSANEVA-ATANASOVA University of Exeter, UK	NUMERICAL BIFURCATION ANALYSIS OF COORDINATED MOVEMENT DYNAMICS
LUNCH		
CHAIR	EUSEBIUS DOEDEL	
17:00-17:30	LUIS BENET Universidad Nacional Autónoma de México (UNAM), Cuernavaca, México	A SIMPLE MODEL FOR THE LOCATION OF SATURN'S F RING
17:30-18:00	MARTA NET Universitat Politècnica de Catalunya, Barcelona, Spain	THERMAL CONVECTION IN AUTO-GRAVITATING SPHERES AT LOW EKMAN NUMBERS
18:00-18:30	PABLO M. VILELA Pontificia Universidad Católica del Perú (PUCP), Lima, Perú	CHARACTERIZATION OF OSCILLATORY AND CHAOTIC FRONTS PROPAGATING IN A MOVING FLUID
19:00	POSTER SESSION	
Friday 07		
ROOM	Hotel San Agustín "El Dorado", Salón de Eventos	
CHAIR	ITAMAR PROCACCIA	
10:00-10:30	FEDOR MITSCHKE Universität Rostock, Rostock, Germany	SOLITON MOLECULES FOR ADVANCED OPTICAL TELECOMMUNICATIONS
10:30-11:00	THOMAS H. SELIGMAN UNAM and Centro Internacional de Ciencias, Cuernavaca, Morelos, México	QUASI STATIONARY NON- EQUILIBRIUM PROCESSES, SHORT TIME SERIES, CORRELATION ANALYSIS AND MARKET EVOLUTION
COFFEE BREAK		

CHAIR		CARLOS PANDO	
11:30-12:00	EDSON DENIS LEONEL Universidade Estadual Paulista, UNESP, Rio Claro, Brazil	CONVERGENCE TOWARDS ASYMPTOTIC STATE IN 1-D MAPPINGS: A SCALING INVESTIGATION	
12:00-12:30	ALBERTO ROBLEDO Universidad Nacional Autónoma de México (UNAM), D.F., México	STATISTICAL-MECHANICAL STRUCTURES IN THE DYNAMICS AT OR NEAR THE ONSET OF CHAOS	
LUNCH			
ROOM	PARANINFO OF UNSAAC (AUDITORIO PRINCIPAL)		
19:00-20:30	ITAMAR PROCACCIA The Weizmann Institute of Science Rehovot, Israel Outreach Lecture: <i>"Numbers in Nature, Art and Architecture"</i> http://www.ifuap.buap.mx/eventos/Workshop15/outreach.html		

EXTENDED WORKSHOP

	SPEAKER	TITLE OF THE LECTURE
Monday 10		
ROOM	Hotel San Agustín "El Dorado", Salón de Eventos	
CHAIR	David P. Sanders	
09:30-10:00	ITAMAR PROCACCIA The Weizmann Institute of Science, Rehovot, Israel	WHAT DETERMINES FORCE CHAINS IN GRANULAR MEDIA?
10:00-10:30	SEBASTIAN WIECZOREK University College Cork, Cork, Ireland	NON-OBVIOUS THRESHOLDS FOR RATE-INDUCED BIFURCATIONS
COFFEE BREAK		
CHAIR	GUSTAVO CRUZ-PACHECO	
11:00-11:30	ARTURO OLVERA Universidad Nacional Autónoma de México (UNAM), D.F., México	PARAMETRIC STABILITY OF THE LEVITRON
11:30-12:00	DAVID P. SANDERS Universidad Nacional Autónoma de México (UNAM), D.F., México	EFFICIENT ALGORITHMS FOR DYNAMICS IN A RANDOM ENVIRONMENT
12:10-12:50	JORGE R. TREDICCE PPME Université de la Nouvelle Calédonie, Noumea - Nouvelle Calédonie	EXTREME EVENTS IN DYNAMICAL SYSTEMS (TUTORIAL)
LUNCH		
14:00	GUIDED TOUR	

TUESDAY 11		
ROOM	Hotel San Agustín "El Dorado", Salón de Eventos	
CHAIR	FAN-YI LIN	
09:30-10:00	BORIS A. MALOMED Tel Aviv University, Tel Aviv, Israel	NEW PERSPECTIVES IN STUDIES OF MULTIDIMENSIONAL SOLITONS
10:00-10:30	PANAYOTIS PANAYOTAROS Universidad Nacional Autónoma de México (UNAM), D.F., México	OPTICAL SOLITONS IN NEMATIC LIQUID CRYSTALS: CONTINUOUS AND DISCRETE MODELS
COFFEE BREAK		
CHAIR	ARTURO OLVERA	
11:00-11:30	JORGE R. TREDICCE PPME Université de la Nouvelle Calédonie, Noumea - Nouvelle Calédonie	PREDICTABILITY OF EXTREME EVENTS IN A LASER SYSTEM
11:30-12:10	JUAN SÁNCHEZ UMBRÍA Universitat Politècnica de Catalunya, Barcelona, Spain	CONTINUATION METHODS FOR DISSIPATIVE PARTIAL DIFFERENTIAL EQUATIONS I (TUTORIAL)
12:20-13:00	MARTA NET Universitat Politècnica de Catalunya, Barcelona, Spain	CONTINUATION METHODS FOR DISSIPATIVE PARTIAL DIFFERENTIAL EQUATIONS II (TUTORIAL)
LUNCH		
14:00	GUIDED TOUR	
WEDNESDAY 12		
ROOM	Hotel San Agustín "El Dorado", Salón de Eventos	
CHAIR	BORIS A. MALOMED	
09:30-10:00	HERVÉ LEBLOND LUNAM Université, Université d'Angers, Angers, France	FEW-CYCLE SOLITONS IN SUPERCONTINUUM GENERATION DYNAMICS

10:00-10:30	FAN-YI LIN National Tsing Hua University, Hsinchu, Taiwan	CHAOS TIME DELAY SIGNATURE SUPPRESSION AND BANDWIDTH ENHANCEMENT BY ELECTRICAL HETERODYNING
COFFEE BREAK		
CHAIR	PANAYOTIS PANAYOTAROS	
11:00-11:30	GUSTAVO CRUZ-PACHECO Universidad Nacional Autónoma de México (UNAM), D.F., México	SEASONAL AND CLIMATIC EFFECTS ON DENGUE AND WEST NILE VIRUS INFECTIONS
11:30-12:00	LUIS BENET Universidad Nacional Autónoma de México (UNAM), Cuernavaca, México	AUTOMATIC DIFFERENTIATION TECHNIQUES AND TAYLOR INTEGRATION I (TUTORIAL)
12:10-12:50	LUIS BENET Universidad Nacional Autónoma de México (UNAM), Cuernavaca, México	AUTOMATIC DIFFERENTIATION TECHNIQUES AND TAYLOR INTEGRATION II (TUTORIAL)
LUNCH		
THURSDAY 13		
ROOM	Hotel San Agustín "El Dorado", Salón de Eventos	
CHAIR	EUSEBIUS DOEDEL	
09:30-10:00	PABLO PADILLA Universidad Nacional Autónoma de México (UNAM), D.F., México	GROWTH RATE AND SHAPE AS POSSIBLE CONTROL MECHANISMS FOR THE SELECTION OF MODE DEVELOPMENT IN OPTIMAL BIOLOGICAL BRANCHING PROCESSES: THE PATTERNING PROGRAM IN LUNG FORMATION

10:00-10:30	GONZALO MARCELO RAMÍREZ Universidad Mayor de San Andrés, La Paz, Bolivia.	RESPONSE TO SYNCHRONIZATION: FROM FIREFLIES COURTSHIP TO SOCIAL MODELS
COFFEE BREAK		
CHAIR	CARLOS PANDO	
11:00-11:30	EUSEBIUS DOEDEL Concordia University, Montreal, Quebec, Canada	PERIODIC AND CONNECTING ORBITS IN MAXWELL'S RESTRICTED (N+1) -BODY PROBLEM
11:30-12:00	CARLOS PANDO Universidad Autónoma de Puebla (BUAP), México	EFFECTS OF SMALL INTERACTION IN TWO MUTUALLY COUPLED MOLECULAR CHAOTIC LASERS
LUNCH		
Friday 14		
ROOM	Hotel San Agustín "El Dorado", Salón de Eventos	
CHAIR	CARLOS PANDO	
10:00-11:30	OPEN SEMINARS (PROPOSED SEMINARS DURING THE WORKSHOP.)	
11:30-12:00	ROUND TABLE.	
12:00	CLOSING REMARKS.	
LUNCH		