Schedule

Participants can also register Sunday afternoon from 19:00 to 20:30.

	Monday	Tuesday	Wednesday	Thursday	Friday
09:00 AM	Registration	**S. Yakovenko**	**A. Albouy**	**J. Franks**	
09:45 AM	Opening				
10:00 AM	**C. Simó**	**C. Li**	**C. Christopher**	**J. Françoise**	**D. G. Saari**
11:00 AM	Coffee	Coffee	Coffee	Coffee	Coffee
11:30 AM	**M. Sabatini**	**T. M. Seara**	**J. Bobok**	**A. Delshams**	**N. Fagella**
12:00 PM	**A. Buica**	**M. Alvarez**	**D. Juher**	**M. A. Teixeira**	**F. Dumortier**
12:30 PM	**D. Schlomiuk**	**F. Diacu**	**A. Peris**	**E. Ponce**	
01:00 PM	Lunch	Lunch	Lunch	Conference Picture	Closing
				Lunch	Lunch
03:30 PM	**D. Volk**	**X. Zhang**	Social Activities	**A. Guillamon**	
04:00 PM	**W. Yessen**	**A. Ruiz-Herrera**		Posters	
04:30 PM	**F. Rong**	**C. Pantazi**			
05:00 PM	Coffee	Coffee		Coffee	
05:30 PM	**G. Roberts**	Posters		**Scientific Contribution of J. Llibre**	
	E. Piña				
07:15 PM	City Hall Reception City Hall Piano Concert Glass of Cava	Ping-Pong		Ping-Pong	
08:15 PM				Dinner 20:30-00:30	

Monday, October 1st

9:00-9:45	Registration	
9:45-10:00	Opening Ceremony	
10:00-11:00	**Carles Simó** (Universitat de Barcelona) The stability properties of Hill's linear periodic ODE for large parameters	Page 5
11:00-11:30	Coffee Break	
11:30-12:00	**Marco Sabatini** (Università degli Sutudi di Trento) The period function's higher order derivatives	Page 19
12:00-12:30	**Adriana Buică** (Universitatea Babes-Bolyai) A second order analysis of the periodic solutions for nonlinear periodic differential systems with a small parameter	Page 9
12:30-13:00	**Dana Schlomiuk** (Université de Montreal) The global topological classification of the Lotka-Volterra quadratic differential systems	Page 20
13:00-15:30	Lunch	
15:30-16:00	**Denis Volk** (Kungliga Tekniska Högskolan) Interval translation maps of three intervals	Page 22
16:00-16:30	**William N. Yessen** (University of California at Irvine) Dynamics of trace maps motivated by applications in spectral theory of quasicrystals	Page 23
16:30-17:00	**Feng Rong** (Shanghai Jiao Tong University) Classification of Lattes maps on $\mathbf{P}^2$	Page 18
17:00-17:30	Coffee Break	
17:30-18:00	**Gareth E. Roberts** (College of the Holy Cross) Relative equilibria in the four-vortex problem with two pairs of equal vorticities	Page 18
18:00-18:30	**Eduardo Piña** (Universidad Autónoma Metropolitana – Iztapalapa) Newtonian few-body problem central configurations with gravitational charges of both signs	Page 16
19:15-	City Hall Reception	

Tuesday, October 2nd

9:00-10:00	**Sergei Yakovenko** (Weizmann Institute of Science) Abelian integrals of general rational 1-forms are defined over $\mathbb{Q}$	Page 5
10:00-11:00	**Chengzhi Li** (Peking University and Xian Jiaoto University) Uniqueness of limit cycles for Liénard differential equations of degree four	Page 3
11:00-11:30	Coffee Break	
11:30-12:00	**Tere M. Seara** (Universitat Politècnica de Catalunya) Oscillatory motions in the restricted circular planar three body problem	Page 14
12:00-12:30	**Martha Alvarez** (Universidad Autónoma Metropolitana – Iztapalapa) Behavior of the binary collision in a planar restricted (N+1)-body problem	Page 7
12:30-13:00	**Florin Diacu** (University of Victoria) Rotopulsating orbits in the curved N-body problem	Page 11
13:00-15:30	Lunch	
15:30-16:00	**Xiang Zhang** (Shanghai Jiaotong University) The 16th Hilbert problem: a simple version on algebraic limit cycles	Page 24
16:00-16:30	**Alfonso Ruiz-Herrera** (Universidad de Granada) Chaos in delay differential equations with applications in population dynamics	Page 19
16:30-17:00	**Chara Pantazi** (Universitat Politècnica de Catalunya) On the Darboux theory of integrability of non-autonomous polynomial differential systems	Page 15
17:00-17:30	Coffee Break	
17:30-18:30	**Posters Session 1**	
18:45-20:30	Ping Pong Competition	

Poster Session 1 (Tuesday, 17:30-18:30)

1	**Javier Aroza** (Universitat Politècnica de València) Chaotic behavior of the solution C_0-semigroup of the von Foerster–Lasota equation in different phase spaces	Page 25
2	**Esther Barrabés** (Universitat de Girona) Transfers from LEOs to GEOs visiting libration points in the Sun-Earth RTBP	Page 26
3	**Jefferson L. R. Bastos** (Universidade Estadual Paulista – IBILCE) A class of cubic Rauzy Fractals	Page 27
4	**Claudio A. Buzzi** (Universidade Estadual Paulista – IBILCE) No periodic orbits for the Einstein–Yang–Mills equations	Page 30
5	**Víctor Castellanos** (Universidad Juárez Autónoma de Tabasco) Global dynamics of the May–Leonard system	Page 32
6	**Magdalena Caubergh** (Universitat Autònoma de Barcelona) Global phase portraits of cubic systems having a center simultaneously at the origin and at infinity	Page 33
7	**Isabel Checa** (Universidad de Huelva) Nilpotent systems with an inverse integrating factor. Center problem and integrability	Page 34
8	**Rodrigo D. Euzébio** (Universidade Estadual Paulista) Global Dynamics of the Lev Ginzburg Equation	Page 36
9	**Luis Franco** (Universidad Autonoma Metropolitana) Stability of fixed points for periodic Hamiltonian systems	Page 38
10	**Isaac A. García** (Universitat de Lleida) Cyclicity of a simple focus via the vanishing multiplicity of inverse integrating factors	Page 38
11	**Maite Grau** (Universitat de Lleida) Liouvillian integrability and invariant algebraic curves of ordinary differential equations	Page 41
12	**Juan L.G. Guirao** (Universidad Politécnica de Cartagena) On the dynamics of the rigid body with a fixed point: periodic orbits and integrability	Page 42
13	**Mauricio F.S. Lima** (Universidade Federal do ABC) Limit Cycles for a class of continuous piecewise linear differential systems with three zones	Page 42

14	**Ricardo M. Martins** (Universidade Estadual de Campinas – UNICAMP) Limit cycles for a class of non-linear planarpiecewise-continuous vector fields	Page 45
15	**João Carlos Medrado** (Universidade Federal de Goiás) Limit cycles, invariant meridians and parallels for polynomial vector fields on the torus	Page 47
16	**Luis F. Mello** (Universidade Federal de Itajubá) Discontinuous piecewise linear differential systems with two zones in the plane: study of limit cycles	Page 48
17	**Marcelo Messias** (Universidade Stadual Paulista – Presidente Prudente) Global dynamics in the Poincaré ball of the Chen system having invariant algebraic surfaces	Page 49
18	**Jesús S. Pérez del Río** (Universidad de Oviedo) Quasi-homogeneous planar polynomial differential systems and their integrability	Page 53
19	**Alex C. Rezende** (Universidade de São Paulo) Phase portraits on the Poincaré disc of a SIS model	Page 57
20	**Lucy A. Roberto** (Universidade Estadual Paulista – IBILCE) New doubly-symmetric families of comet like periodic orbits in the spatial restricted (N+1)-body problem	Page 58
21	**Justyna Signerska** (Polish Academy of Sciences) Firing map for periodically and almost-periodically driven integrate-and-fire models: a dynamical systems approach	Page 58
22	**Anoop Sivasankaran** (Khalifa University of Science Technology and Research) An empirical stability analysis of the Caledonian symmetric four-body model	Page 59
23	**Claudio Vidal** (Universidad del Bio Bio) Global dynamics of the Kummer–Schwarz differential equation	Page 61
24	**Jiang Yu** (Shanghai Jiaotong University) The existence of traveling wave of FitzHugh–Nagumo system	Page 62
25	**Sundus Zafar** (Universitat Autònoma de Barcelona) A particular family of globally periodic birational maps	Page 63

Wednesday, October 3rd

9:00-10:00	**Alain Albouy** (Institut de Mécanique Céleste et de Calcul des Éphémérides) On generation of independent quadratic conserved quantities	Page 1
10:00-11:00	**Colin Christopher** (University of Plymouth) Local Integrability and Linearizability of 3D Lotka–Volterra Systems	Page 1
11:00-11:30	Coffee Break	
11:30-12:00	**Jozef Bobok** (Czech Technical University) Semiconjugacy to a map of a constant slope - new results	Page 8
12:00-12:30	**David Juher** (Universitat de Girona) Topological and algebraic reducibility for patterns on trees	Page 14
12:30-13:00	**Alfred Peris** (Universitat Politècnica de València) Distributional chaos for linear operators	Page 16
13:00-15:30	Lunch	
15:30-	Social Activities	

Thursday, October 4th

9:00-10:00	**John Franks** (Northwestern University) Symplectic surface diffeomorphisms	Page 3
10:00-11:00	**Jean–Pierre Françoise** (Universite de Paris VI) Algebraic moments: from Abel equations to Jacobian conjecture	Page 2
11:00-11:30	Coffee Break	
11:30-12:00	**Amadeu Delshams** (Universitat Politècnica de Catalunya) Global instability in the elliptic restricted three body problem using two scattering maps	Page 10
12:00-12:30	**Marco Antonio Teixeira** (University of Campinas) Simultaneous linearization of a class of pairs of involutions with normally hyperbolic composition	Page 21
12:30-13:00	**Enrique Ponce** (Universidad de Sevilla) Hunting three nested limit cycles with only two linear foci	Page 17
13:00-15:30	Lunch	
15:30-16:00	**Antoni Guillamon** (Universitat Politècnica de Catalunya) Synchronisation predictions via extended phase response curves	Page 13
16:00-17:00	**Posters Session 2**	
17:00-17:30	Coffee Break	
17:30-18:30	On the scientific contribution of Jaume Llibre	
18:45-20:00	Ping Pong Competition	
20:30-00:30	Conference dinner	

Poster Session 2 (Thursday, 16:00-17:00)

1	**Sabrina Badi** (University of Guelma) Limit cycles of a generalized Liénard differential equation via averaging theory	Page 25
2	**Gamaliel Ble** (Universidad Juárez Autónoma de Tabasco) On the maximum number of limit cycles of a class of generalized Liénard differential systems	Page 28
3	**José Luis Bravo** (Universidad de Extremadura) On the trigonometric moment problem	Page 29
4	**Pedro T. Cardin** (Universidade Estadual Paulista – FEIS) Extending geometric singular perturbation theory for ordinary differential equations with three time-scales	Page 31
5	**Tiago De Carvalho** (Universidade Estadual Paulista) Bifurcations of non-smooth vector fields on $\mathbb{R}^3$. The cusp-fold singularity	Page 32
6	**Marcia P. Dantas** (Universidade Federal Rural de Pernambuco) Study of the equilibrium points of the restricted three-body problem with an oblate primary	Page 35
7	**Antoni Ferragut** (Universitat Politècnica de Catalunya) Some new results on Darboux integrable differential systems	Page 37
8	**Johanna D. García Saldaña** (Universitat Autònoma de Barcelona) On the approximation of periodic solutions of non-autonomous ordinary differential equations	Page 39
9	**Márcio Ricardo Alves Gouveia** (Universidade Estadual Paulista) Dynamics at infinity and other global dynamical aspects of Shimizu–Morioka equations	Page 40
10	**Amar Makhlouf** (University of Annaba) Periodic orbits of a fourth-order non-autonomous differential equation	Page 43
11	**Víctor Mañosa** (Universitat Politècnica de Catalunya) Periodic orbits of integrable birational maps on the plane: blending dynamics and algebraic geometry, the Lyness' case	Page 44
12	**Félix Martínez-Giménez** (Universitat Politècnica de València) The specification property in the dynamics of linear operators	Page 45
13	**Susana Maza** (Universitat de Lleida) Periodic orbits in the Rossler prototype-4 system	Page 46

14	**Ana Cristina Mereu** (Universidade Federal de São Carlos) Reversibility and branching of periodic orbits	Page 48
15	**Jaime Rezende De Moraes** (Universidade Estadual Paulista) Piecewise linear systems and singular perturbation techniques	Page 50
16	**Marina Murillo** (Universidad Politécnica de Valencia) Chaotic behavior of operators on compact sets	Page 50
17	**Regilene Oliveira** (Universidade de São Paulo – São Carlos) On integrable systems on $\mathbb{S}^3$	Page 51
18	**Merce Ollé** (Universitat Politècnica de Catalunya) Solar system transport in a chain of bicircular models	Page 52
19	**Set Pérez-González** (Universitat Autònoma de Barcelona) Existence and Uniqueness of limit cycles for generalized φ-laplacian Liénard equations	Page 54
20	**Claudio Pessoa** (Universidade Estadual Paulista – IBILCE) On the reversible quadratic polynomial vector fields on the two dimensional sphere	Page 55
21	**Violetta Pilyugina** (Saint Petersburg State University) Number of invariant straight lines for homogeneous polynomial vector fields of arbitrary degree and dimension	Page 55
22	**Silvia Pina-Romero** (Instituto Tecnologico Autonomo de Mexico) Rotation intervals for quasi-periodically forced circle maps	Page 56
23	**Paulo Ricardo da Silva** (Universidade Estadual Paulista – IBILCE) Regularization and singular perturbation techniques for non-smooth systems	Page 60
24	**Pura Vindel** (Universitat Jaume I) Totally ordered non-singular Morse–Smale flows on S^3	Page 62
25	**Elizabeth Zollinger** (St. Joseph's College) Computing analytically periodic orbits of differential equations	Page 64

Friday, October 5th

10:00-11:00	**Donald G. Saari** (University of California) The three million body problem	Page 4
11:00-11:30	Coffee Break	
11:30-12:00	**Núria Fagella** (Universitat de Barcelona) On the connectivity of the Julia set for meromorphic entire maps	Page 12
12:00-13:00	**Freddy Dumortier** (Hasselt University) Relaxation oscillations in slow-fast systems	Page 2
13:00-13:15	Closing Ceremony	
13:15-	Lunch	