

MONDAY, 17

CONFERENCE ROOM **Andalucía III**

Chair: L.L. Bonilla	9:30	C. Cercignani <i>Existence of self-similar, eternal solutions of the Boltzmann equation</i>
	10:15	G. Papanicolaou <i>Imaging and time reversal in a noisy environment</i>

COFFEE BREAK / POSTER EXHIBITION

Chair: P. Gerard	11:30	H. Andreanson <i>Global existence of solutions to the Einstein-Vlasov system with hyperbolic symmetry</i>
	12:00	J. Nieto <i>High-field limit for the Vlasov-Poisson-Fokker-Planck system: dynamics of the pressureless gas</i>
	12:30	C. LeBris <i>On the micro-macro models for non newtonian fluids</i>

LUNCH TIME

Chair: S. Mas-Gallic	15:30	P. Pietra <i>Identification of doping profiles in semiconductors devices</i>
	16:15	V. Romano <i>Hydrodynamical model for GaAs semiconductors and applications to electronic devices</i>
	COFFEE BREAK	
	17:15	R. Pinnau <i>A nonlinear discretization scheme for the quantum drift diffusion model</i>
	17:45	R. Escobedo <i>A free boundary problem for a multidimensional drift-diffusion model in semiconductor physics</i>
	18:15	G. Platero <i>Dynamics of AC driven superlattices</i>

MONDAY, 17

CONFERENCE ROOM Andalucía I

	9:30- 11:00	Session in room Andalucía III
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COFFEE BREAK / POSTER EXHIBITION

Chair: R. Illner	11:30	A. Jüngel <i>Entropy dissipation methods for nonlinear evolution equations</i>
	12:00	A. Rjasanow <i>Numerical study of the asymptotic behaviour of the Mott-Smith model</i>
	12:30	A. Bobylev <i>Exact eternal solutions of the Boltzmann equation</i>

LUNCH TIME

Chair: P. Garrido	15:30	J. Brey <i>Two examples of the implications of inelasticity in the Boltzmann equation</i>
	16:15	V. Garzó <i>Rheological properties of a granular mixture</i>
	COFFEE BREAK	
	17:15	R. Illner <i>Diffusive equilibria in granular flow</i>
	17:45	V. Ricci <i>A rigorous derivation of a linear kinetic equation of Fokker-Planck type in the limit of grazing collisions</i>
	18:15	B. Luquin <i>Derivation of an hydrodynamic/diffusion limit for an arc discharge of moderate pressure</i>

TUESDAY, 18

CONFERENCE ROOM **Andalucía III**

Chair: G. Papanicolaou	9:30	P. Gerard <i>Dispersive estimates and nonlinear Schrödinger equations for general metrics</i>
	10:15	M. Pulvirenti <i>The Vlasov equation for an infinitely extended plasma</i>

COFFEE BREAK / POSTER EXHIBITION

Chair: M.Pulvirenti	11:30	E. Cagliotti <i>Infinite particle dynamics in 1-D</i>
	12:00	S. Caprino <i>The Vlasov equation with infinite mass</i>
	12:30	F. Golse <i>The Navier-Stokes limit of the Boltzmann equation</i>

LUNCH TIME

Chair: C. LeBris	15:30	F. Jauho <i>Nonequilibrium Green function approach to modeling of transport through mesoscopic systems</i>
	16:15	F. Castella <i>Non derivation of the quantum Boltzmann equation from the periodic Von-Neumann equation</i>
	COFFEE BREAK	
	17:15	G. Wolansky <i>Supporting functionals for Vlasov and Schrödinger-Poisson systems</i>
	17:45	H. Lange <i>On the ring cavity problem</i>
	18:15	V. Pérez-García <i>Vortices in Bose-Einstein condensates: physics, mathematics and computations</i>

TUESDAY, 18

CONFERENCE ROOM Andalucía I

	9:30- 11:00	Session in room Andalucía III
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COFFEE BREAK / POSTER EXHIBITION

	9:30- 11:00	Session in room Andalucía III
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LUNCH TIME

Chair: B. Wennberg	15:30	J. Mazón <i>The Dirichlet problem for linear growth functionals</i>
	16:15	J. Dolbeault <i>Asymptotic stability for equations of quantum mechanics and kinetic theory</i>
	COFFEE BREAK	
	17:15	T. Goudon <i>Homogeneization and diffusion approximation of kinetic equations</i>
	17:45	A. Klar <i>Microscopic and kinetic derivations of traffic flow equations</i>
	18:15	M. Seaid <i>Construction of fluid dynamic models with relaxation for a given kinetic equations</i>

WEDNESDAY, 19

CONFERENCE ROOM **Andalucía III**

Chair: J. Soler	9:30	L. Vega <i>Formation of singularities and selfsimilar motion of vortex filament under LIA</i>
	10:15	F. Poupaud <i>Classical and quantum transport in random media (I)</i>

COFFEE BREAK / POSTER EXHIBITION

Chair: L. Vega	11:30	A. Vasseur <i>Classical and quantum transport in random media (II)</i>
	12:00	P. Bechouche <i>Modeling diffusion in the Schrödinger formalism: from random potentials to quantum diffusion</i>
	12:30	O. Sánchez <i>Long time behaviour to the Schrödinger-Poisson-Slater system</i>
	13:00	I. Catto <i>Recent mathematical results on the quantum modelling of crystals</i>

CONFERENCE ROOM **Andalucía I**

Chair: A. Arnold	11:30	A. Carpio <i>Depinning transitions in discrete drift-diffusion systems</i>
	12:00	O. Bokanowski <i>Fast multipole method for multi-variable integrals</i>
	12:30	M. Lemou <i>Fast and conservative wavelet schemes for collisional kinetic operators</i>
	13:00	C. Schmeiser <i>Burgers-Poisson: A nonlinear dispersive model problem</i>

21:00

CONGRESS DINNER
in Carmen de los Mártires

THURSDAY, 20

CONFERENCE ROOM Andalucía III

Chair: J.M. Vega	9:30	G. Joulin <i>Structure and dynamics of premixed flames</i>
	10:15	A. Liñán <i>Modelling of laminar jet diffusion flames</i>

COFFEE BREAK / POSTER EXHIBITION

Chair: G. Frosali	11:30	S. Mischler <i>Gelation in coagulation and fragmentation models</i>
	12:00	P. E. Jabin <i>Kinetic formulation for a line-energy Ginzburg-Landau model</i>
	12:30	K.P. Hadeler <i>Reaction transport equations</i>

LUNCH TIME

Chair: G. Toscani	15:30	B. Wennberg <i>On energy conservation in the Boltzmann equation</i>
	16:15	L. Boudin <i>On the singularities of the global small solutions of the full Boltzmann equation</i>
	COFFEE BREAK	
	17:15	L. Saint-Raymond <i>From the BGK Boltzmann model to the Navier-Stokes equation</i>
	17:45	S. Mancini <i>Asymptotic preserving schemes for the Lorenz models</i>
	18:15	M. Westdickenberg <i>Some new velocity averaging results</i>

THURSDAY, 20

CONFERENCE ROOM Andalucía I

	9:30- 11:00	Session in room Andalucía III
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COFFEE BREAK / POSTER EXHIBITION

Chair: A. Marquina	11:30	J. M. Vega <i>Drift instability of nearly-inviscid Faraday waves</i>
	12:00	A. Sánchez <i>The asymptotic description of branched-chain explosions</i>
	12:30	E. Oran/ I. Domínguez <i>Theory and simulation of deflagration to detonation transition</i>

LUNCH TIME

Chair: J. Brey	15:30	A. Marquina <i>Level-set methods for multicomponent compressible fluids: shock-induced instabilities</i>
	16:15	O. Dorn <i>Shape reconstruction in scattering media with voids using a transport model and level sets</i>
	COFFEE BREAK	
	17:15	M. Moscoso <i>Use of spectral methods for the radiation transport equation</i>
	17:45	C. Simeoni <i>A kinetic scheme for the Saint-Venant system with a source term</i>
	18:15	S. Mas-Gallic <i>Resolution of kinetic models by the diffusion-velocity method</i>

FRIDAY, 21

CONFERENCE ROOM Andalucía III

Chair: Y. Brenier	9:30	C. Bardos <i>The weak coupling limit of systems of N quantum particles</i>
	10:15	L.L. Bonilla <i>Nonlinear charge transport, wave propagation and self-oscillations in semiconductors superlattices</i>

COFFEE BREAK / POSTER EXHIBITION

Chair: S. Cordier	11:30	F. Mehats <i>On a Schrödinger-Vlasov-Poisson model</i>
	12:00	L. Pareschi <i>High order schemes for stiff hyperbolic and kinetic equations</i>
	12:30	G. Russo <i>Time relaxed Monte Carlo methods for the Boltzmann equation</i>

LUNCH TIME

Chair: W. Strauss	15:30	G. Toscani <i>Spectral methods for collisional kinetic models and numerical singular limits</i>
	16:15	H.J.Nussenzveig-Lopes <i>Existence of a weak solution for the semigeostrophic equations with integrable initial data</i>
	16:45	E. Ruiz-Arriola <i>On the quantum transport of a polaron</i>

COFFEE BREAK

Chair: J.L. Vázquez	17:45	W. Strauss <i>A survey of stability theory in collisionless plasmas</i>
	19:00	Y. Brenier <i>Scientific Committee, Harmonic functions and gas dynamics</i>

FRIDAY, 21

CONFERENCE ROOM Andalucía I

	9:30- 11:00	Session in room Andalucía III
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COFFEE BREAK / POSTER EXHIBITION

Chair: C. Bardos	11:30	C. Rosier <i>Thermodynamics of self-gravitating systems</i>
	12:00	K. Fellner <i>Cometary flows, neutron transfer and convergence to equilibrium</i>
	12:30	M. Esteban <i>Large time behaviour for Streater's energy-transport models</i>

LUNCH TIME

	15:30- 17:15	Session in room Andalucía III
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COFFEE BREAK

Closure session in room Andalucía III		
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