TOPICS IN KINETIC THEORY

Summer School and Workshop
University of Victoria, June 29 – July 3, 2009
Location: UVic, DSB (David Strong Building), C 108

PROGRAM

Monday, June 29, 2009

Time	Speaker	Title
Morning		
9:00	Reinhard Illner	**Welcome Address**
9:10 – 10:00	Yan Guo	A L^p-L^\infty Approach in the Boltzmann Study **(Talk I of III)**
10:10 – 11:00	Axel Klar	Mathematical models for fibre dynamics and fibre laydown in non-woven production **(Talk I of III)**
11:00 – 11:30		**Coffee Break**
11:30 - 12:20	Pierre Degond	Kinetic and Fluid Modeling of Complex Systems **(Talk I of III)**
12:20 – 2:00		**Lunch (on your own)**
Afternoon		
2:00 – 2:50	Yan Guo	A L^p-L^\infty Approach in the Boltzmann Study **(Talk II of III)**
3:00 – 3:30	Anton Arnold	Quantum Fokker-Planck models: kinetic and operator theory approaches
3:30 – 4:00		**Coffee Break**
4:00 – 4:30	Hakan Andreasson	The Einstein-Vlasov-Maxwell system and sharp bounds on the mass-radius ratio of spherically symmetric charged objects
4:40 – 5:20	Kemens Fellner	Coagulation-Fragmentation Models with Diffusion

Tuesday, June 30, 2009

Time	Speaker	Title
Morning		
9:10 – 10:00	Yan Guo	A L^p-L^\infty Approach in the Boltzmann Study **(Talk III of III)**
10:10 – 11:00	Axel Klar	Mathematical models for fibre dynamics and fibre laydown in non-woven production **(Talk II of III)**
11:00 – 11:30		**Coffee Break**
11:30 - 12:20	Pierre Degond	Kinetic and Fluid Modeling of Complex Systems **(Talk II of III)**
12:20 – 2:00		**Lunch (on your own)**
Afternoon		
2:00 – 2:50	Tai Ping Liu	Invariant Manifolds for Stationary Boltzmann Equation
3:00 – 3:30	Jose Carrillo	Some kinetic models for swarming
3:30 – 4:00		**Coffee Break**
4:00 – 4:30	Jean Dolbeault	Hypocoercivity for kinetic equations with linear relaxation terms
4:40 – 5:20	Vitali Vougalter	On threshold eigenvalues and resonances for the linearized NLS equation

***Evening: Guided walk through downtown Victoria

Wednesday, July 1, 2009

***Excursion

All day – bring your hiking shoes, sunscreen, etc…)

Thursday, July 2, 2009

Time	Speaker	Title
Morning		
9:10 – 10:00	Axel Klar	Mathematical models for fibre dynamics and fibre laydown in non-woven production **(Talk III of III)**
10:10 – 11:00	Pierre Degond	Kinetic and Fluid Modeling of Complex Systems **(Talk III of III)**
11:00 – 11:30		**Coffee Break**
11:30 - 12:20	Kazuo Aoki	Approach to steady motion of a plate moving in a collision less gas under a constant external force
12:20 – 2:00		**Lunch (on your own)**
Afternoon		
2:00 – 2:30	Philippe Morrison	On Landau Damping
2:40 – 3:20	Reinel Sospedra	Global Classical Solutions to the 3D Relativistic Vlasov-Maxwell System with Bounded Spatial Density
3:20 – 3:50		**Coffee Break**
3:50 – 4:20	Robert Strain	Global Newtonian limit for the Relativistic Boltzmann Equation near Vacuum
4:30 – 5:00	Daniel Matthes	Distribution of wealth in market economies -- a kinetic approach
5:00 – 5:30	Angus Juengel	Electron transport and heating in semiconductor devices and circuits

Friday, July 3, 2009

Time	Speaker	Title
Morning		
9:10 – 9:40	Henning Struchtrup	Analytical and numerical solutions of the regularized 13 moment equations for rarefied gases
9:50 - 10:20	Stephane Cordier	Mesoscopic description of the behavior of a simple financial market
10:20 – 10:50	**Coffee Break**	
10:50 – 11:20	Simona Mancini	A Fokker-Planck model from neuroscience for two interacting populations
11:30 - 12:00	Hyung-Ju Hwang	Boundary value problems in the Vlasov-Poisson system
12:00 – 1:30	**Lunch (on your own)**	
Afternoon		
1:30 - 2:00	Florian Mehats	Stable steady states and self-similar blow up solutions for the relativistic gravitational Vlasov-Poisson system
2:10 – 2:40	Luc Mieussens	Analysis of an asymptotic preserving scheme for linear kinetic equations in the diffusion limit
2:40 -	**Closing Remarks**	