Monday, September 7, 2015

9:00-9:30	**Registration**
9:30-9:45	**Jonathan Ben-Artzi, Mahir Hadžić, Stephen Pankavich** *Welcome*
9:45-10:30	**Pierre Degond (Imperial College) and Yan Guo (Brown)** *Welcome and historical remarks*
10:30-11:00	*Coffee Break*
11:00-11:45	**François Golse (École polytechnique)** *On the mean-field and classical limits for the N-body Schrödinger equation*
11:50-12:35	**Yan Guo (Brown)** *Derivation of steady Navier-Stokes equations from the Boltzmann theory*
12:35-14:00	*Lunch*
14:00-14:45	**Philip Morrison (Austin)** *Sculpting Vlasov phase space*
14:45-15:15	*Coffee Break*
15:15-16:00	**Zhiwu Lin (Georgia Tech)** *Instability index, exponential trichotomy and invariant manifolds for Hamiltonian PDEs*
16:05-16:50	**Bruno Després (Paris Pierre et Marie Curie)** *Advances in the modeling of kinetic sheath in plasma*

Tuesday, September 8, 2015

9:00-9:45	**Silvia Caprino (Roma Tor Vergata)** *On a Vlasov-Poisson plasma with infinite charge and velocities*
9:50-10:35	**Evelyne Miot (École polytechnique)** *Uniqueness for the Vlasov-Poisson system with unbounded density*
10:35-11:00	*Coffee Break*
11:00-11:45	**Walter Strauss (Brown)** *A body moving in a kinetic sea*
11:50-12:35	**Alexander Schekochihin (Oxford)** *Phase mixing vs. nonlinear advection in drift-kinetic plasma turbulence*
12:35-14:30	*Lunch + photo*
14:30-15:15	**Clément Mouhot (Cambridge)** *Hölder continuity of solutions to Vlasov-Fokker-Planck type equations with rough coefficients*
15:20-16:05	**Daniel Han-Kwan (École polytechnique)** *The quasineutral limit of the Vlasov-Poisson system*

18:30-22:30	**Conference Dinner at 170 Queen's Gate** *18:30 Reception, 19:30 Dinner*

Wednesday, September 9, 2015

9:00-9:45	**Gerhard Rein (Bayreuth)** *Gravitational collapse and the Vlasov equation*
9:50-10:35	**Jacques Smulevici (Paris-Orsay)** *A vector field method for kinetic transport equations with applications to classical and relativistic systems*
10:35-11:00	*Coffee Break*
11:00-11:45	**Martin Taylor (Cambridge)** *Stability of Minkowski space for the massless Einstein-Vlasov system*
11:50-12:35	**Simone Calogero (Chalmers)** *Relativistic diffusion*
12:35-14:00	*Lunch*
14:00-14:45	**Mohammed Lemou (Rennes)** *On quantitative rearrangement inequalities and their applications to Vlasov-Poisson, HMF and 2D-Euler systems*
14:45-15:15	*Coffee Break*
15:15-15:45	**Igor Gapyak (Kyiv)** *On the rigorous derivation of the Enskog kinetic equation*
15:50-16:20	**Cesare Tronci (Surrey)** *Hybrid kinetic-fluid models for magnetized plasmas*
16:25-16:55	**Julien Barré (Nice)** *Perturbation of non homogeneous stationary states of the Vlasov equation*

Thursday, September 10, 2015

9:00-9:45	**Claude Bardos (Paris Diderot)** *About the Maxwell-Boltzmann relation for fluids and plasmas*
9:50-10:35	**Jacob Bedrossian (Maryland)** *Landau damping in Gevrey regularity for Vlasov-Poisson and connections with hydrodynamic stability*
10:35-11:00	*Coffee Break*
11:00-11:45	**Toan Nguyen (Penn State)** *Stability of a hot plasma in a solid torus*
11:50-12:35	**Thomas Holding (Cambridge)** *Instability of non-monotone equilibria of the relativistic Vlasov-Maxwell system on unbounded domains*
12:35-14:00	*Lunch*
14:00-14:45	**Claude Bardos (Paris Diderot)** *Open problems and future directions*
14:45-15:15	*Coffee Break*
15:15-16:00	**Susana Gutierrez (Birmingham)** *Strichartz estimates for the kinetic transport equation*
16:05-16:50	**Jonathan Luk (Cambridge)** *Strichartz estimates and moment bounds for the Vlasov-Maxwell system*

Friday, September 11, 2015

9:00-9:45	**Irene Gamba (Austin)** *On computational issues of Vlasov-Maxwell and Vlasov-Poisson-Landau*
9:50-10:35	**Yingda Cheng (Michigan State)** *Energy-conserving discontinuous Galerkin schemes for the Vlasov-Maxwell system*
10:35-11:00	*Coffee Break*
11:00-11:45	**Martin Campos Pinto (Paris Pierre et Marie Curie)** *On structure-preserving DG-PIC schemes for the Vlasov-Maxwell system*
11:50-12:35	**Nikolaos Bournaveas (Edinburgh)** *Global existence and blow up for some kinetic and hyperbolic models of chemotaxis*
12:40-13:25	**Slim Ibrahim (University of Victoria)** *The Vlasov-Poisson system for stellar dynamics in spaces of constant curvature*
13:25-13:35	*Closing*