

MONDAY 11 Derivation of hydrodynamic equations from kinetic theory (Serafim Kalliadasis and Greg Pavliotis)	1000-1100	Prof Alexander Gorban University of Leicester	Hydrodynamic manifolds for kinetic equations
	1100-1130	Coffee & Discussion	
	1130-1230	Prof Alexander Gorban	Cont'd
	1230-1300	Discussion	
	1300-1400	Lunch	
	1400-1430	Prof Grigorios Pavliotis Dept. of Mathematics, Imperial College London	Mean field limits for interacting diffusions
	1430-1500	Dr Benjamin Goddard School of Mathematics, Edinburgh University	An introduction to dynamical density functional theory
	1500-1530	Dr Miguel Duran-Olivencia Dept. of Chemical Engineering, Imperial College London	A density functional approach for systems of orientable particles
	1530-1600	Tea	
	1600-1630	Dr Andrew Duncan Dept. of Mathematics, Imperial College London	Effective dynamics of diffusion processes in rough environments
	1630-1700	Dr Carlos Braga Dept. of Chemical Engineering, Imperial College London	A control volume study of the pressure tensor across a liquid-vapour interface
	1700-1800	Drinks reception	
TUESDAY 12 Large Eddy Simulations of turbulent flows (Bill Jones & Maarten van Reeuwijk)	1000-1100	Prof Eric Lamballais University of Poitiers	Basics of LES
	1100-1130	Coffee & Discussion	
	1130-1230	Prof Ugo Piomelli Queen's University, Kingston	Subfilter-scale modelling
	1230-1300	Discussion	
	1300-1400	Lunch	
	1400-1500	Prof Eric Lamballais	Implicit LES and regularization
	1500-1600	Prof Ugo Piomelli	Applications of LES
	1600-1630	Tea & Discussion	
	1630-1730	Participants doing LES work	5-min overviews and discussion

WEDNESDAY 13 Moving contact lines (Omar Matar & Demetrios Papageorgiou)	1000-1100	Prof Stephen Davis Northwestern University	Elements of moving contact lines I
	1100-1130	Coffee & Discussion	
	1130-1230	Prof Stephen Davis	Elements of moving contact lines II
	1230-1300	Discussion	
	1300-1400	Lunch – provided by the CDT	
	1400-1430	Dr David Sibley Dept. of Mathematical Sciences, Loughborough University	Comparisons of a variety of physical and mathematical models for the modelling of thin droplet spreading
	1430-1500	Prof Panos Theodorakis Polish Academy of Sciences	Superspreading: insights from molecular-level simulations
	1500-1530	Tea	
	1530-1600	Dr James Sprittles Mathematics Institute, Warwick University	Dynamic wetting in a Knudsen gas
	1600-1630	Prof Andy Parry Dept. of Mathematics, Imperial College London	What lies beyond the surface tension?
	1630-1700	Profs Omar Matar & Demetrios Papageorgiou	Wrap-up
THURSDAY 14 Order-disorder transitions in incompressible active fluids (Chiu Fan Lee & Gunnar Pruessner)	1000-1100	Prof John Toner University of Oregon	Birds, magnets, soap, and sandblasting: surprising connections in the theory of incompressible flocks
	1100-1130	Coffee & Discussion	
	1130-1230	Prof John Toner	Cont'd
	1230-1300	Discussion	
	1300-1400	Lunch	
	1400-1430	Dr Tom Montenegro-Johnson DAMTP, University of Cambridge	Singularities for internal, external, and artificial microbiofluid dynamics
	1430-1500	Dr Tyler Shendruk Dept. of Physics, University of Oxford	Screened active matter: hydrodynamic screening leads to structured flows in active nematics
	1500-1530	Dr Miguel Duran-Olivencia Dept. of Chemical Engineering, Imperial College London	Mesosopic nucleation theory: describing multistep nucleation using fluctuating hydrodynamics
	1530-1600	Tea	
	1600-1630	Dr Guillaume Salbreux Francis Crick Institute	Hydrodynamics of cellular flows
	1630-1700	Dr Silke Henkes Dept. of Physics, Aberdeen University	Active nematics on a sphere: How motion, alignment and curvature lead to pattern formation
	1700-1800	Drinks reception	

FRIDAY 15 Collective dynamics (Pierre Degond & Ory Schnitzer)	1000-1100	Prof Pierre Degond Dept. of Mathematics, Imperial College London	Modelling collective dynamics with fluid equations
	1100-1130	Coffee & Discussion	
	1130-1230	Prof Pierre Degond	Cont'd
	1230-1300	Discussion	
	1300-1400	Lunch	
	1400-1430	Dr Chiu Fan Lee Dept. of Bioengineering, Imperial College London	A reaction-advection-diffusion model of collective motion
	1430-1500	Dr Yongyun Hwang Dept. of Aeronautics, Imperial College London	Pattern formation in flowing gyrotactic algal suspensions
	1500-1530	Dr Anaïs Khuong Francis Crick Institute	Behavioural study of a neurogenic process: from cell interactions towards a collective pattern
	1530-1600	Tea	
	1600-1630	Dr Benjamin Aymard Dept. of Chemical Engineering, Imperial College London	Emergence of vascularisation networks
	1630-1700	Mr Markus Schmidtchen Dept. of Mathematics, Imperial College London	Zoology of a non-local interaction model for two species with cross-diffusion