ITN Workshop on Shocks and Interfaces
L4, Mathematical Institute, University of Oxford

Wednesday 3 July 2019

09:00h	Registration
09:30h	Welcome and Introduction
10:00h	**Eduard Fereisl (Czech Academy of Sciences)** *Vanishing Viscosity Limit for the Isentropic Navier-Stokes System*
10:45h	Coffee
11:15h	**Ulrik Fjordholm (University of Oslo)** *Statistical Solutions of Hyperbolic Conservation Laws*
12:00h	**Phoebus Rosakis (University of Crete)** *Cells Use a Phase Transition to Find Each Other in Fibrous Darkness*
12:45h	Lunch
13:45h	**Manuel Torrilhon (RWTH Aachen University)** *Interfaces in Model-Adaptive Simulations of Rarefied Gases*
14:30h	**Mahir Hadzic (King's College London)** *Continued Gravitational Collapse for Newtonian Stars*
15:15h	Refreshments
15:45h	**Christian Klingenberg (Würzburg University)** *On Finite Volume Schemes for the Euler Equations with Gravity – Towards a Well-Balanced Scheme that is Asymptotic Preserving in the Low Mach Limit*
16:30h	**Li He (University of Oxford)** *Multiscale Fluid–Solid Interface for Aerodynamics–Heat Transfer Interaction – A Turbomachinery Aerothermal Perspective*
17:15-17:45h	Welcome Drink

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Thursday 4 July 2019

09:00h	**Remi Abgrall (University of Zurich)** *Some recent results on the approximation of conservation laws: revisiting the notion of conservation*
09:45h	**Kyle Mandli (Columbia University in NY)** *Embedding Barriers Into Shallow Water Simulations with Applications to Storm Surge*
10:30h	Coffee
11:00h	**Jan Giesselmann (TU Darmstadt)** *A Posteriori Error Estimates of Numerical Methods for Random Conservation Laws*
11:45h	**Manuel Castro (University of Malaga)** *High-order Well-Balanced Numerical Methods for Systems of Balance Laws*
12:30h	Lunch
13:30h	**Christophe Chalons (Versailles University)** *On All-Regime and Well-Balanced Lagrange-Projection Schemes for Compressible Fluid Systems*
14:15h	**Franziska Weber (Carnegie Mellon University)** *A Sufficient Condition for the Kolmogorov 4/5 Law for Stationary Martingale Solutions to the 3D Navier-Stokes Equations*
15:00h	Refreshments
15:30h	**Mikhail Feldman (University of Wisconsin)** *Uniqueness and Stability for Shock Reflection Problem*
16:15h	**David Ketcheson (KAUST)** *Relaxation Runge-Kutta Methods: Fully-Discrete Entropy-Stability for Hyperbolic PDEs*
19:00h	Workshop Dinner, The Old Library at Wadham College

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Friday 5 July 2019

09:00h	**Constantine Dafermos (Brown University)** *The Zero Relaxation Limit*
09:45h	**Francesco Della-Porta (Leipzig University)** *Moving Phase Interfaces to Select Physically Relevant Martensitic Microstructures*
10:30h	Coffee
11:00h	**Dehua Wang (University of Pittsburg)** *Weak and Smooth Solutions to the Gauss-Codazzi Equations*
11:45h	**Konstantinos Koumatos (University of Sussex)** *On the Relative Entropy Method in Quasiconvex Elasticity*
12:30h	Lunch
13:30h	**Donatella Donatelli (Università degli Studi dell'Aquila)** *Singular Limits Arising in Atmosphere Modelling*
14:15h	**Wei Xiang (City University of Hong Kong)** Contact Discontinuity in the Nozzles
15:00h	Refreshments
15:30h	**Cleopatra Christoforou (University of Cyprus)** *Measure Valued Solutions for Polyconvex Thermo-Elasticity*
16:15h	**Charalambos Makridakis (University of Sussex)** *Approximate Young measures, Kinetic Models and Computation of Measure Valued Solutions of Hyperbolic Problems*