

**PDE and Fluids  
Schedule  
L4**

**Monday 29 September**

9:30-10:30	Diego Córdoba, <i>Vortex layer cascades and finite time singularities for incompressible fluids</i>
10:30-11:00	Coffee
11:00-12:00	Laure Saint-Raymond, <i>Fluctuations in kinetic and fluid models</i>
12:00-14:00	Lunch
14:00-15:00	Matthew Novack, <i>Dissipative Euler solutions and helicity</i>
15:00-15:30	Coffee
15:30-16:30	Steve Shkoller, <i>The sad story of the steepening soundwave</i>

**Tuesday 30 September**

9:30-10:30	Maria Colombo, <i>Non-uniqueness and instability in vanishing viscosity solutions of the Euler equations</i>
10:30-11:00	Coffee
11:00-12:00	Zaher Hani, <i>Longtime derivation of the Boltzmann and fluid equations</i>
12:00-14:00	Lunch
14:00-15:00	Thomas Hou
15:00-15:30	Coffee
15:30-16:30	Javier Gómez-Serrano, <i>Discovery of unstable singularities</i>

**Wednesday 1 October**

10:00-11:00	Vladimir Šverák, <i>A report on the Navier-Stokes Problem</i>
11:00-11:30	Coffee
11:30-12:30	Chris Skinner, <i>The Birch—Swinerton-Dyer Conjecture: a millennium prize problem at 25</i>
12:30-14:30	Lunch
14:30-15:30	Martin Hairer, <i>Yang—Mills and the Mass Gap</i>
15:30-16:00	Coffee
16:00-17:00	Avi Wigderson, <i>P vs NP</i>
17:00	Reception in Mathematical Institute
19:00	Dinner at Exeter College for invited guests

**Thursday 2 October**

10:00-11:00	Jeff Brock, <i>3-manifolds after Perelman: topology, geometry, and effective rigidity</i>
11:00-11:30	Coffee
11:30-12:30	Bruce Kleiner, <i>Ricci flow after Perelman</i>
12:30-14:30	Lunch
14:30-15:30	Burt Totaro, <i>The Hodge conjecture: geometry and analysis</i>
15:30-16:00	Coffee
16:00-17:00	Kannan Soundararajan, <i>Progress on zeta and L-functions motivated by the Riemann hypothesis</i>

**Friday 3 October**

9:30-10:30	Jacob Bedrossian
10:30-11:00	Coffee
11:00-12:00	Klaus Widmayer, <i>Global axisymmetric Euler flows with rotation</i>
12:00-14:00	Lunch
14:00-15:00	Tarek Elgindi, <i>Aspects of the long-time behavior of ideal fluids</i>
15:00-15:30	Coffee
15:30-16:30	Alexander Kiselev, <i>Singularity suppression by fluid flow</i>