## Blurring the lines between pure and applied through mixing

Sunday 1 – Friday 6 June 2025

Venue: Sabhal Mor Ostaig, (Gaelic College) Sleat, Isle of Skye, IV44 8RQ

The programme is subject to change. All times are British Summer Time (BST).

SUNDAY 1 JUNE	
12.00	Coach pick up from Bayes Centre, Edinburgh
	Please meet at the large parking bay on Crichton Street. The coach will depart at 12pm, so please
	arrive 10mins earlier to load your bags on and get seated.
12.30	Coach pick up from Edinburgh Airport
	Please meet at the coach parking. Jayde Sommers will be onsite to make sure everyone is in the
	coach parking bay before calling in the coach. Please look out for Jayde who'll be holding a Sabhal
	Mor Ostaig sign.
	There will be a rest stop along the way, where you'll be able to purchase refreshments.
18.30-19.00	Arrive at Sabhal Mor Ostaig and check into accommodation
19.00-19.30	Dinner

MONDAY 2 JUNE		
08.00-09.15	Breakfast	
09.30-10.30	Peter Haynes, University of Cambridge	
	Mathematical models of transport and mixing in atmosphere and ocean	
10.30-11.00	Refreshments	
11.00-11.30	Umberto Pappalettera, Bielefeld University	
	On anomalous dissipation and regularization in Gaussian isotropic turbulence	
11.45-12.15	Luigi De Rosa, Gran Sasso Science Institute	
	Dissipation concentration	
12.30-13.30	Lunch	
14.00-15.00	Yao Yao, National University of Singapore	
	Growth and asymptotics in incompressible fluids	
15.00-15.30	Refreshments	
15.30-16.00	Matthew Novack, Purdue University	
	Non-trivial stationary solutions for the 2D Navier-Stokes equations	
16.00-17.00	David Dritschel, University of St Andrews	
	The onset of filamentation on vorticity interfaces	
17.30-18.30	Dinner	
20.00 onwards	Jean-Luc Thiffeault, University of Wisconsin	
	Jacques Vanneste, University of Edinburgh	

TUESDAY 3 JUNE	
08.00-09.15	Breakfast
09.30-10.30	Klas Modin, Chalmers University of Technology
	Matrix Hydrodynamics and Mixing
10.30-11.00	Refreshments
11.00-11.30	Theresa Lange, Schola Normale Superiore Pisa
	Non-uniqueness of Leray-Hopf solutions for the 3D fractional Navier-Stokes equations perturbed by
	transport noise
11.45-12.15	Michele Dolce, École Polytechnique Fédérale de Lausanne
	On viscous vortex dipoles and crystals
12.30-13.30	Lunch
14.00-15.00	Andrew Gilbert, University of Exeter
	Vortex motion, stretching and shedding
15.00-15.30	Refreshments
15.30-16.00	David Villringer, Imperial College London
	Alpha-unstable flows and the fast dynamo problem
16.00-17.00	Christian Seis, University of Münster
	Exponential mixing by random cellular flows
17.30-18.30	Dinner
20.00 onwards	Helena Nussenzveig Lopes, Universidade Federal Do Rio de Janeiro
	Vlad Vicol, New York University

WEDNESDAY 4 JUNE		
Breakfast		
Jeremie Bec, CNRS, Institut de Physique de Nice		
Lagrangian relative dispersion and intermittency in three-dimensional turbulence		
Refreshments		
Samuel Punshon-Smith, Tulane University		
Lower Bounds on Lyapunov Exponents for SPDE		
Simon Thalabard, Université Côte D'azur		
Smoothing by intermittency in multifractal Kraichnan Flows		
Lunch		
Free afternoon		
Dinner		

THURSDAY 5 JUNE	
08.00-09.15	Breakfast
09.30-10.30	Gianluca Crippa, University of Basel
	Weak, renormalized, and vanishing-viscosity solutions of the two-dimensional Euler equations
10.30-11.00	Refreshments
11.00-11.30	Martin Taylor, Imperial College London
	Phase mixing for the Vlasov equation in cosmology
11.45-12.15	William Cooperman, ETH Zurich
	Residual diffusion for fluid flows
12.30-13.30	Lunch
14.00-15.00	Alexandra Tzella, University of Birmingham
	Boundary conditions for active Brownian particles
15.00-15.30	Refreshments
15.30-16.00	Chiara Calascibetta, Centre Inria d'Université Côte d'Azur
	Hidden symmetry in passive scalar advected by 2D Navier-Stokes turbulence
16.00-17.00	Luca Biferale, University of Rome Tor Vergata
	Generative AI for Lagrangian Turbulence
19.00 onwards	Workshop Dinner

FRIDAY 6 JUNE	
08.00-08.45	Breakfast
09.00	Coach pick up Sabhal Mor Ostaig
	Please meet outside front entrance of the main building. The coach will depart at 9am, so please
	arrive 10mins earlier to load your bags on and get seated. Jayde Sommers will collect your room keys
	from you as you hop on the coach.
09.30	Coach drop off Kyle of Lochalsh train station
	There will be a rest stop along the way, where you'll be able to purchase refreshments. A packed
	lunch will be provided before hopping on coach.
15.00	Coach drop off Edinburgh Airport
15.30	Coach drop off Bayes Centre, Edinburgh