BRIN MATHEMATICS RESEARCH CENTER

Summer School: Fluid Dynamics
Schedule

All talks are held at the Brin Center on the 4th floor of the CSIC Building.

Monday, July 17

8:30 – 9:00	BREAKFAST	
9:00 – 10:00	Peter Constantin	*Nonlocality in Fluids: Electrostatic and Polymeric Forces-1*
10:00 –10:15	COFFEE BREAK	
10:15 –10:45	Dave Levermore	*Special Talk: History of the Equations of Fluid Dynamics*
10:45 – 11:00	COFFEE BREAK	
11:00 –12:00	Huy Nguyen	*Interface Dynamics: the Muskat Problem-1*
12:00 – 2:00	LUNCH	
2:00 – 3:00	Toan Nguyen	*Instabilities in Boundary Layers-1*
3:00 – 3:15	COFFEE BREAK	
3:15 – 3:45	Kyle Liss	*Junior Talk: Enhanced Diffusion for Alternating Shear Flows*
3:45 – 4:00	COFFEE BREAK	
4:00 – 5:00	Tarek Elgindi	*On the Long-Time Behavior of 2D Euler Flows-1*

Tuesday, July 18

8:30 – 9:00	BREAKFAST	
9:00 – 10:00	Toan Nguyen	*Instabilities in Boundary Layers-2*
10:00 –10:15	COFFEE BREAK	
10:15 – 10:45	Noah Stevenson	*Junior Talk: Well-Posedness of the Traveling Wave Problem for the Free Boundary Incompressible Navier-Stokes Equations*
10:45 – 11:00	COFFEE BREAK	
11:00 – 12:00	Tarek Elgindi	*On the Long-Time Behavior of 2D Euler Flows-2*
12:00 – 2:00	LUNCH	
2:00 – 3:00	Peter Constantin	*Nonlocality in Fluids: Electrostatic and Polymeric Forces-2*
3:00 – 3:15	COFFEE BREAK	
3:15 – 3:45	Elizabeth Carlson	*Junior Talk: Continuous Data Assimilation: Insights & Connections to Understanding Turbulent Flows*
3:45 – 4:00	COFFEE BREAK	
4:00 – 5:00	Huy Nguyen	*Interface Dynamics: the Muskat Problem-2*

Wednesday, July 19

8:30 – 9:00	BREAKFAST	
9:00 – 10:00	Tarek Elgindi	*On the Long-Time Behavior of 2D Euler Flows-3*
10:00 – 10:15	COFFEE BREAK	
10:15 – 10:45	Chi-Hao Wu	*Junior Talk: Positive Lyapunov Exponent in Plasmas: Noncollisional and Collisional Mechanisms*
10:45 – 11:00	COFFEE BREAK	
11:00 – 12:00	Peter Constantin	*Nonlocality in Fluids: Electrostatic and Polymeric Forces-3*
12:00 – 2:00	LUNCH	
2:00 – 2:30	Karim Shikh Khalil	*Junior Talk: Strong Ill-Posedness in L^∞ for the Riesz Transform Problem*
2:30 – 3:00	Min Jun Jo	*Junior Talk: Velocity Blow-Up of the Planar Euler Flows in Some Critical Spaces*
3:00 – 3:30	Anastassiya Semonova	*Junior Talk: Instability of Stokes Waves*
3:30 – 4:00	Coffee Break	
4:00 – 4:30	Trinh Nguyen	*Junior Talk: Asymptotics of Helmholtz-Kirchhoff Point-Vortices in the Phase Space*
4:30 – 5:00	Patrick Phelps	*Junior Talk: Asymptotic Properties and Separation Rates for Navier-Stokes Flows*
5:00 – 5:30	Quyuan Lin	*Junior Talk: Stable Singularity Formation of the Inviscid Primitive Equations*
7:00 – 9:00	DINNER AT FOGO DE CHAO NORTH BETHESDA	

Thursday, July 20

8:30 – 9:00	BREAKFAST	
9:00 – 10:00	Peter Constantin	*Nonlocality in Fluids: Electrostatic and Polymeric Forces-4*
10:00 –10:15	COFFEE BREAK	
10:15 – 10:45	Qirui Peng	*Junior Talk: Non-Unique Stationary Solution of Forced SQG*
10:45 – 11:00	COFFEE BREAK	
11:00 – 12:00	Tarek Elgindi	*On the Long-Time Behavior of 2D Euler Flows--4*
12:00 – 2:00	LUNCH	
2:00 – 3:00	Francisco Gancedo	*Interface Dynamics: the Muskat Problem--3*
3:00 – 3:15	COFFEE BREAK	
3:15-3:45	Mustafa Aydin	*Junior Talk: On Asymptotic Properties of the Boussinesq Equations*
3:45 – 4:00	COFFEE BREAK	
4:00 – 5:00	Toan Nguyen	*Instabilities in Boundary Layers-3*

Friday, July 21

8:30 – 9:00	BREAKFAST	
9:00 – 10:00	Francisco Gancedo	*Interface Dynamics: the Muskat Problem-4*
10:00 – 10:15	COFFEE BREAK	
10:15 – 10:45	Marc Nualart Batalla	*Junior Talk: Linear Inviscid Damping in the 2D Euler-Boussinesq System in the Periodic Channel*
10:45 – 11:00	COFFEE BREAK	
11:00 – 12:00	Toan Nguyen	*Instabilities in Boundary Layers-4*
12:00 – 2:00	LUNCH/ CONCLUSION	