Fluids CDT Summer School 2018

Current topics in active fluids: theory and experiments

16-20 July, Imperial College London, South Kensington Campus

	Monday 16 July	**Tuesday 17 July**	**Wednesday 18 July**	**Thursday 19 July**	**Friday 20 July**
09:30-11:00	Julia Yeomans *Active nematics I: Active turbulence and motile topological defects*	Eric Keaveny *Stokes with the most: theory and computation of low Reynolds number flows with applications to active particles II*	Julia Yeomans *Active nematics II: Topology in biology*	John Toner *Fish gotta swim, birds gotta fly, I gotta do Feynman graphs 'til I die: a continuum theory of flocking I*	Ewa Paluch *Cytoskeletal networks mechanics across scales: from molecules to forces*
11:00-11:30	Coffee break				
11:30-13:00	Eric Keaveny *Stokes with the most: theory and computation of low Reynolds number flows with applications to active particles I*	Mike Shelley *Local and nonlocal slender-body theories for the Stokes equations*	Peer Fischer *Microswimmers and active swimmers*	Ewa Paluch *Cell migration by flow and friction*	John Toner *Fish gotta swim, birds gotta fly, I gotta do Feynman graphs 'til I die: a continuum theory of flocking II*
13:00-14:00	Lunch				
14:00-15:30	Andre Brown *Syntax in C. elegans locomotion*	Peer Fischer *Chiral propellers*	Mike Shelley *Application to simulating active and passive suspensions and complex cellular flows*	Marco Polin *Locomotion in bacteria*	
15:30-16:00	Coffee break				
16:00-17:30	Chiu Fan Lee *Fluctuating hydrodynamics of passive and active fluids I*	Free	Chiu Fan Lee *Fluctuating hydrodynamics of passive and active fluids II*	Marco Polin *Locomotion in eukaryotes*	
17:30-19:30				Barbecue	