Monday 25 June 2018

09:00-09:25 Coffee and Registration

Edmond J Safra Lecture Theatre

09:25-09:30 Welcome from Joe Bhaseen

09:30-10:15 Markus Heyl (Dresden)

Dynamical quantum phase transitions

10:15-11:00 Pierfrancesco Urbani (IPHT)

11:00-11:30 Coffee Break

11:30–12:15 Edgar Roldan (ICTP, Trieste)

12:15–12:45 Poster Spotlights

12:45–14:30 Lunch and Posters

14:30–15:15 Eric Vanden-Eijnden (Courant Institute, NYU)

15:15-16:00 Andrea Cavagna (CNR-ISC, Institute for Complex Systems, Rome)

16:00-16:30 Coffee Break

16:30–17:15 Anatoli Polkovnikov (Boston)

17:15-18:00 Poster Session

18:00-19:00 Welcome Reception in Terrace Café (Macadam Building, Strand Campus)

Tuesday 26 June 2018

09:00-09:30 Coffee and Registration

Edmond J Safra Lecture Theatre

09:30-10:15 Ehud Altman (Berkeley)

10:15-11:00 Dmitry Abanin (Geneva)

New non-equilibrium quantum many-body states enabled by ergodicity breakdown

11:00–11:15 Poster Spotlights

11:15-11:45 Coffee Break

Strands	Physical Edmond J Safra Lecture Theatre	Statistical Mechanics KO.18/KO.16
11:45-12:30	Arijeet Pal (Oxford)	Raffaella Burioni (Parma) Neuronal Avalanches in cortex dynamics and the synchronization transition
12:30-13:00	Federico Carollo (Nottingham) Current fluctuations in boundary- driven quantum spin-chains	Carl Dettmann (Bristol) Network connectivity in complex geometries

13:00-14:30	Lunch and Posters		
14:30-15:15	Adam Nahum (Oxford)	Simone Pigolotti (Uni Rome) Generic properties of stochastic entropy production	Edmond J Safra Lecture Theatre 18:30-19:30 Public lecture
15:15-15:45	Filippo Maria Gambetta (Nottingham) Discrete time crystals in metastable open quantum systems	Carlos Perez- Espigares (Nottingham) Critical phenomena and their microscopic origin in the dynamical fluctuations of driven diffusive systems	- Allan Tucker. Three AI Algorithms Inspired by Data from the Life Sciences
15:45-16:15	Coffee Break		
16:15-16:45	Marzena Symanska (UCL)	Markus Meuwly (Basel) Dynamics Far from Equilibrium in Atmospheric Molecular Processes	<u>Wednesday</u>
16:45-18:00	Poster Session		27 June 2018

 $\textbf{09:00-09:30} \qquad \text{Coffee/Registration}$

Edmond J Safra Lecture Theatre

09:30-10:15 Hernan Makse, CUNY

10:15-11:00 Daniel Sussman, Syracuse Anomalous interfaces in simple models of dense biological tissue

11:00-11:15 Poster Spotlight

11:15-11:45 Coffee Break

Strands	Physical Edmond J Safra Lecture Theatre	Biological KO.18/KO.16	
11:45-12:15	Katarzyna Macieszczak	Ivet Bahar (Pittsburgh)	
	(Cambridge)	Multiscale Modeling and	
	Thermodynam ic uncertainty relations	Simulations of Neurotransmitter Transport	
12:15-12:45	Patrick Pietzonka	Richard Blythe (Edinburgh)	
	(Cambridge)	Universal Scaling	
	Thermodynam	of a growing	
	ic bounds on	interface	
	current fluctuations	constrained by a membrane	
12:45-14:15	Lunch and Posters		
14:15-14:45	Robert Jack (Cambridge) Large	Carmen Molina- Paris (Leeds) Stochastic	
	deviation of	descriptors to study	
	the active	the fate of naive T	
	work in active	cell clonotypes in	
	fluid	the periphery	
14:45-15:15	Patrick Ilg (Reading)	Chiu Fan Lee (Imperial) The	

Nanorheology and	Physics of Non- Equilibrium Phase	15:15-15:45 Coffee Break
magnetoviscosi ty of magnetic	separation: Implications for	15:45-16:30
nanoparticles in viscoelastic	stress granule formation in the	Luca Dall'Asta
environments	cell cytoplasm	(Turin)

Optimality in self-organized molecular sorting

16:30–17:15 Ton Coolen (KCL)

Inferring parameters of irreversible processes: replica analysis of overfitting in time-to-event regression

17:15-17:20 Concluding remarks