



35th Marian Smoluchowski Symposium on Statistical Physics



17-21 September, 2022, Kraków, Poland

Timetable

IT Invited Talk

CT Contributed Talk

Saturday, 17/09

13:30–14:45		Registration	
14:45–15:00		Welcome Address	
Session 1			
15:00–15:45	IT	<i>Linear response and fluctuation-dissipation relations for stochastic processes under resetting</i>	Igor Sokolov
15:45–15:55		Flash Break	
15:55–16:20	CT	<i>Learning from onion to balance between order and chaos</i>	Leszek Krzemień
16:20–16:45	CT	<i>Stability of gene expression patterns in developmental systems with dynamic morphogen sources</i>	Maciej Majka
16:45–17:15		Flash Break	
17:15–17:40	CT	<i>Multimodal approach in research on DNA damage</i>	Kamila Sofińska
17:40–18:05	CT	<i>Statistical mechanics of adaptive neural networks: Explaining coexistence of avalanches and oscillations in resting human brain</i>	Fabrizio Lombardi
18:05–20:00		Get Together	

Sunday, 18/09

Session 2			
15:00-15:45	IT	<i>To thermalize or not to thermalize, that is the question</i>	Maciej Lewenstein
15:45-15:55	Flash Break		
15:55-16:20	CT	<i>Foundations of statistical mechanics for unstable interactions</i>	Rudolf Hilfer
16:20-16:45	CT	<i>Quantum and classical contributions to entropy production in fermionic and bosonic systems</i>	Krzysztof Ptaszyński
16:45-19:00	Poster Session Party		

Monday, 19/09

Session 3			
09:00–09:45	IT	<i>Quantum Theory of the Classical: Einselection, Envariance, and Quantum Darwinism</i>	Wojciech H. Żurek
09:45–09:55	Flash Break		
09:55–10:20	CT	<i>Geometric Brownian Information Engine</i>	Debasish Mondal
10:20–10:45	CT	<i>A human-size realisation of the Feynman–Smoluchowski ratchet-and-pawl thought experiment</i>	Marc Lajoie
10:45–11:15	Coffee Break		
Session 4			
11:15–12:00	IT	<i>Finding low energy states of low-dimensional spin-glasses via approximate tensor network contractions</i>	Marek Rams
12:00–12:10	Flash Break		
12:10–12:35	CT	<i>Anderson Localization of Composite Particles</i>	Fumika Suzuki
12:35–13:00	CT	<i>Crystalline phases with splay modulation in a system of hard wedges composed of balls</i>	Piotr Kubala
13:00–15:00	Lunch Break		
Session 5			
15:00–15:45	IT	<i>Fractional Brownian motion with random Hurst exponent</i>	Agnieszka Wyłomańska
15:45–15:55	Flash Break		
15:55–16:20	CT	<i>RNA dynamics in the cytoplasm of mammalian cells</i>	Diego Krapf
16:20–16:45	CT	<i>On the scaling properties of spontaneous cell motility</i>	Nahuel Zamponi
16:45–17:15	Coffee Break		

Tuesday, 20/09

Session 6			
09:00–09:45	IT	<i>New developments in relativistic dissipative hydrodynamics</i>	Wojciech Florkowski
09:45–09:55	Flash Break		
09:55–10:20	CT	<i>Solitons in driven overdamped Brownian motion</i>	Artem Ryabov
10:20–10:45	CT	<i>Analytical Extension/Force curve of the Extensible Freely Jointed Chain Model (EFJC) and Worm-like Chain Model (EWLC)</i>	Alessandro Fiasconaro
10:45–11:15	Coffee Break		
Session 7			
11:15–12:00	IT	<i>Emergence of Irreversibility and Hydrodynamic behavior from the Quantum Many-Body Dynamics: Experimental Evidence from Loschmidt Echoes and Related Experiment</i>	Horacio Pastawski
12:00–12:10	Flash Break		
12:10–12:35	CT	<i>Computing with memristive devices</i>	Juan Pablo Carbajal
12:35–13:00	CT	<i>The versatile role of plastic crystals in light harvesting</i>	Agur Sevink
13:00–15:00	Lunch Break		
Session 8			
15:00–15:45	IT	<i>Finite-time dynamical phase transitions in non-equilibrium relaxation</i>	Jan Meibohm
15:45–15:55	Flash Break		
15:55–16:20	CT	<i>Temperature and friction fluctuations inside a harmonic potential</i>	Yann Lanoiselée
16:20–16:45	CT	<i>Resolving a single-atom “thermodynamic limit” in cavity QED: photon correlations and field distributions in the strong-coupling regime</i>	Themistoklis Mavrogordatos
16:45–17:15	Coffee Break		

Wednesday, 21/09

Session 9			
09:00–09:45	IT	<i>Scale-free correlations in the dynamics of a small ($N \sim 10000$) cortical network</i>	Dante Chialvo
09:45–09:55	Flash Break		
09:55–10:40	IT	<i>Dynamics, fractal geometry and the exponents of the Kardar-Parisi-Zhang equation</i>	Fernando Oliveira
10:40–11:05	CT	<i>Natural time scales embedded in the mitoBK ion current dynamics</i>	Łukasz Machura
11:05–11:35	Coffee Break		
Session 10			
11:35–12:20	IT	<i>Collective dynamical regimes and synchronization transitions in spontaneous brain activity</i>	Raffaella Burioni
12:20–12:45	CT	<i>Anomalous diffusion originated by two Markovian hopping-trap mechanisms</i>	Gianni Pagnini
12:45–13:00	Closing Address + Lunch		