

# Tuesday, July 11, 2023

## MINOS MAIN HALL

Plenary		MAIN CONFERENCE	Tuesday 11
09.00 - 09.40	Kosterlitz J.M.	<i>State Selection in Driven Out of Equilibrium Systems – Noisy Stabilized ...</i>	Chair
09.40 - 10.20	Aharony A.	<i>The Wilson-Fisher renormalization group after 50 years</i>	Marinari E.
10.20 - 11.00	Kurths J.	<i>Stability of power grid concerning tropical cyclones: Increasing resilience by ...</i>	
11.00 - 11.30	<b>Coffee break</b>		

## MINOS MAIN HALL

Area A		MAIN CONFERENCE	Tuesday 11
11.30 - 12.00	Łuczka J.	Classical equipartition theorem and its universal quantum counterpart	Chair
12.00 - 12.30	Spiechowicz J.	Periodic potential can enormously boost free particle transport induced by ...	Gudowska-Nowak E.
12.30 - 12.50	Mishra P.	Structures in a 2D colloids interacting via modified inverse-power potentials ...	
12.50 - 13.10	Nakajima C.	Random Field Ising Model for Random Single Vertex Origami	
13.10 - 13.30	Kalogeropoulos N.	On the origin of the escort distributions	
13:30 - 15.00	<b>Break</b>		
15.00 - 15.30	Gudowska-Nowak E.	<i>Freeness in cognitive science</i>	Chair
15.30 - 16.00	Hanel R.	<i>About a curious equivalence: Boltzmann Entropy as measure of information....</i>	Łuczka J.
16.00 - 16.20	Chacon-Acosta G.	<i>Fourth-order term effects in the Fick-Jacobs equation for diffusion in narrow...</i>	
16.20 - 16.40	Strecka J.	<i>Ising-Heisenberg diamond-decorated square lattice in a magnetic field: exact...</i>	
16.40 - 17.00	Gerasimenko V.	<i>On hierarchies of evolution equations for correlations of many quantum ....</i>	
17.00 - 17.30	<b>Coffee break</b>		
Special Session 1		Spin glass theory and far beyond	
17.30 - 17.50	Kent-Dobias J.	<i>How to count in hierarchical landscapes: quenched complexity for the...</i>	Chair
17.50 - 18.10	Tonolo T.	<i>Marginal stability in the spherical spin-glass: on the competition between ...</i>	Ricci-Tersenghi F.
18.10 - 18.30	Martin-Mayor V.	<i>The mystery of rejuvenation and memory in spin-glasses</i>	
18.30 - 18.50	Paga I.	<i>On the Nature of Memory in spin glasses</i>	
18.50 - 19.10	Moreno-Gordo J.	<i>Numerical study of the six-dimensional Ising spin glass on a field</i>	
19.10 - 19.30	Nicoletti F.	<i>Low energy excitations in vector spin glasses</i>	
19.30 - 19.50	Cammarota C.	<i>Signal reconstruction in rough landscapes: The BBP transition and beyond</i>	

## ARIADNE HALL

Area B		MAIN CONFERENCE	Tuesday 11
11.30 - 12.00	Kovacs I.	<i>Spatial and temporal cluster tomography</i>	Chair
12.00 - 12.30	Eapen J.	<i>Phonon Modes in Disordered Systems</i>	Hristopulos D.
12.30 - 12.50	Materassi M.	<i>Irregular space plasmas dynamics: entropy production vs fractality</i>	
12.50 - 13.10	Ettori F.	<i>The Effects of Defects on Magnetization Reversal Processes</i>	
13.10 - 13.30	Pica Ciamarra M.	<i>The energy cost of local rearrangements makes glasses solid</i>	
13:30 - 15.00	<b>Break</b>		
15.00 - 15.30	Son C.Y.	<i>Universal dipole correlation in homogeneous bulk and interfacial water</i>	Chair
15.30 - 16.00	Špička V.	<i>Non-equilibrium dynamics of open systems, fluctuation-dissipation theorems...</i>	Palmisano C.
16.00 - 16.30	Consolini G.	<i>On the nature of space plasma turbulent fluctuations at sub-ion scales: ....</i>	
16.30 - 16.50	Garzó V.	<i>Shear viscosity of granular mixtures: Assessment of kinetic theories</i>	
16.50 - 17.10	Kadioğlu S.	<i>Locally driven spin collision battery</i>	
17.10 - 17.30	<b>Coffee break</b>		
Meeting		MDPI	Tuesday 11
17.30 - 19.00	Auwerter L.	<i>Entropy Editor Meeting</i>	

## PASIPHAE HALL

Area C	MAIN CONFERENCE	Tuesday 11
11.30 - 12.00	Ejtehadi M.R. <i>Evolution in spatially heterogeneous environments</i>	Chair
12.00 - 12.30	Saad D. <i>Message passing for routing and network design in optical communication</i>	Bertotti M.L.
12.30 - 13.00	Serrano M.A. <i>Renormalization of complex networks</i>	
13.00 - 13.30	Talbot J. <i>Application of statistical physics to agroecology: an adsorption-desorption ....</i>	
13:30 - 15.00	<b>Break</b>	
15.00 - 15.20	Alberti T. <i>The predictable chaos of rare events in complex systems</i>	Chair
15.20 - 15.40	Annibale A. <i>Dynamical analysis of sparse Boolean networks</i>	Ejtehadi M.R.
15.40 - 16.00	Ansell H. <i>Signatures of universal criticality in the anatomic structure of the brain</i>	
16.00 - 16.20	Qureshi B. <i>A universal method for analysing copolymer growth</i>	
16.20 - 16.40	Rojas-Ochoa L.F. <i>Non-gaussian diffusion and long-time correlations in the magnetosphere-....</i>	
16.40 - 17.00	Bekiaris S. <i>Small size, high connectance networks – the case of the artistic social....</i>	
17.00 - 17.30	<b>Coffee break</b>	
Workshop 6	Statistical Physics Methods for Power Grids	Tuesday 11
17.30 - 18.00	Motter A. <i>Scalable control and observability: Power grids and other large-scale networks</i>	Chair
18.00 - 18.30	Meyer-Ortmanns H. <i>Methods of dimensional reduction to assess rare events of blackouts in power...</i>	Odor G.
18.30 - 18.55	Oberhofer U. <i>Data-driven stochastic modelling of power-grid</i>	
18.55 - 19.20	Rydin Gorjão L. <i>The complexity of power-grid frequency dynamics – An application in....</i>	Chair
19.20 - 19.45	Odor G. <i>Non-local synchronization and electric power-grid outages</i>	Beck C.
19.45 - 20.10	Papp O. <i>Study of heterogeneity effects in power grid networks on the community level</i>	

## THESEUS HALL

Area A	MAIN CONFERENCE	Tuesday 11
11.30 - 12.00	Skokos H. <i>Numerical investigation of spatiotemporal chaos in nonlinear lattice models</i>	Chair
12.00 - 12.20	Ovchinnikov I. <i>Dynamics Beyond Statistics and Topological Supersymmetry</i>	Flach S.
12.20 - 12.40	Paillusson F. <i>Ergodicity in theory and in practice</i>	
13:00 - 15.00	<b>Break</b>	
Workshop 3	Complex Networks: Hidden Geometry and Dynamics	Tuesday 11
15.00 - 15.30	Serrano M.A. <i>Detecting the ultra low dimensionality of real networks</i>	Chair
15.30 - 16.00	Eroglu D. <i>Reconstruction of Complex Networks Dynamics from Data: Emergent</i>	Tadic B.
16.00 - 16.30	Morozov A. <i>From networks to spin glasses: Machine learning and statistical inference</i>	
16.30 - 16.50	Biham O. <i>The distribution of cover times of random walks on random regular graphs</i>	
16.50 - 17.10	CheonT. <i>Phase transition in urban agglomeration and segregation</i>	
17.10 - 17.30	<b>Coffee break</b>	
17.30 - 18.00	Soresina C. <i>Cross-diffusion-induced instability on networks</i>	Chair
18.00 - 18.30	Shapoval A. <i>Bak-Tang-Wiesenfeld Sandpile as the Mechanism that Generates the</i>	Dankulov M.M.
18.30 - 18.50	Draskovic-Bracun A. <i>Acoustic metafluids based on random microstructure networks</i>	
18.50 - 19.10	Moelter J <i>Preserving Bifurcations through Moment Closures</i>	
19.10 - 19.30	Bertotti M.L. <i>Innovation diffusion and Bass model on complex networks</i>	
19.30 - 20.00	Gupte N. <i>Climate network analysis of extreme events: Tropical Cyclones</i>	

## AMALTHEA HALL

Area A	MAIN CONFERENCE	Tuesday 11
11.30 - 12.00	Wada T. <i>The gradient-flow equations in information geometry: some approaches from...</i>	Chair Jizba P.
12.00 - 12.30	Matsuzoe H. <i>Invariant and dually flat information geometric structure for deformed ....</i>	
12.30 - 12.50	Tuncer A. <i>Quantum superposition states: Spin-glasses and magnetic classification over...</i>	
12.50 - 13.10	Bianucci M. <i>A generalized definition of cumulants, including operators, to obtain statist....</i>	
13:00 - 15.00	<b>Break</b>	
Workshop 2	Data Science and Econophysics	Tuesday 11
15.00 - 15.30	Podobnik B. <i>The new wealth of nations: How STEM fields generate the prosperity and ....</i>	Chair Argyris P.
15.30 - 15.50	Briola A. <i>Dependency structures in cryptocurrency market from high to low frequency</i>	
15.50 - 16.10	Gontis V. <i>Understanding the nature of memory in the order flow of financial markets</i>	
16.10 - 16.30	Kanazawa K. <i>Quantitative empirical verification of the Lillo-Mike-Farmer hypothesis for.....</i>	
16.30 - 16.50	Makowski M. <i>A special model of risk based on Radon Transform</i>	
17.10 - 17.30	<b>Coffee break</b>	
17.30 - 17.50	Piotrowski E. <i>The maximum of financial greed for the algorithm of two agents cooperation</i>	Chair Gontis V.
17.50 - 18.10	Rydin Gorjão L. <i>Persistence, multifractality, and complexity of the German weather-driven .....</i>	
18.10 - 18.30	Araneda A. <i>A multifractional option pricing formula</i>	
18.30 - 18.50	Loukeris N. <i>Optima performance on neural and hybrid networks</i>	

## MINOTAUR HALL

Area A	MAIN CONFERENCE	Tuesday 11
11.30 - 12.00	Tempesta P. <i>Permutation group entropy: A new route to complexity for real-valued processes</i>	Chair Oliveira F.
12.00 - 12.30	Imparato A. <i>A quantum thermodynamics approach to optimization in complex systems</i>	
12.30 - 12.50	Trombettoni A. <i>Tilted 1D Bose gases and atomtronics</i>	
12.50 - 13.10	Maynar P. <i>Dynamics of an inelastic tagged particle under strong confinement</i>	
13:10 - 15.00	<b>Break</b>	
Workshop 10	Non-Extensive Statistical Mechanics and Kappa Distributions	Tuesday 11
15.00 - 15.30	McComas D. <i>The outer heliosphere: A zoo of nonequilibrium plasmas</i>	Chair Yoon P.
15.30 - 15.55	Gkioulidou M. <i>On the energization of pickup ions downstream of the heliospheric termination...</i>	
15.55 - 16.20	Elliott H. <i>Relationships between solar wind parameters</i>	
16.20 - 16.45	Salem C. <i>New insights on solar wind electrons at 1 AU: Collisionality, heat flux, and ....</i>	
16.45 - 17.10	Malandraki O. <i>Unexpected energetic particle observations near the sun by parker solar....</i>	
17.10 - 17.30	<b>Coffee break</b>	
17.30 - 18.00	Ho G. <i>Energetic and suprathermal particle measurement at the inner heliosphere</i>	Chair Dayeh M.
18.00 - 18.25	Balasis G. <i>Investigation of dynamical complexity in Swarm-derived geomagnetic activity...</i>	
18.25 - 18.50	Katsavrias C. <i>Acceleration and loss of relativistic electrons in the outer radiation belt - ....</i>	
18.50 - 19.15	Hoshino M. <i>Energy partition of thermal and nonthermal particles for a composed....</i>	
19.15 - 19.40	Danos G. <i>Spacecraft "Clusters" for space weather studies</i>	
19.40 - 20.10	Daglis I. <i>Space weather predictability</i>	