Sunday, July 09, 2023

IMPERIAL CONGRESS HALL

15.00 - 20.00	Registration desk	Sunday 09

Monday, July 10, 2023

IMPERIAL CONGRESS HALL

08.00 - 11.00	Registration desk	Monday 10

MINOS MAIN HALL

	Plenary	MAIN CONFERENCE	Monday 10
11.45 - 12.00	Kaniadakis G.	*Welcome Addresses & Opening Ceremony*	Chair
12.00 - 12.10	Metzler R.	*European Physical Society*	Argyrakis P.
12.10 - 12.20	Major of Chania	*Chania municipality*	
12.20 - 12.30	Kaniadakis G.	*Sigmaphi Prizes Cerimony*	
12.30 - 13.00	Group Photo		
13.00 - 14.30	Break		

MINOS MAIN HALL

	Area A	MAIN CONFERENCE	Monday 10
14.30 - 15.00	Motter A.	*Converse symmetry breaking in network dynamics*	Chair
15.00 - 15.30	Field T.	*Dynamical Theory of Spin Noise and Relaxation - Beyond the Lorentzian*	Saad D.
15.30 - 15.50	Kantor Y.	*Correlated percolation of sites not removed by a random walker in 2≤d≤6 dim....*	
15.50 - 16.10	Łepek M.	*Coagulating systems revisited with combinatorial approach – possibilities and....*	
16.10 - 16.30	Corberi F.	*Ordering kinetics in systems with long-range interactions*	
16.30 - 16.50	Dubkov A.	*Probability analysis of nonlinear dynamical systems driven by Ornstein-....*	
16.50 - 17.10	Randon-furling J.	*First-passage time below the diagonal for the Brownian maximum*	
17.10 - 17.30	Coffee break		
17.30 - 18.00	Kosztołowicz T.	*Application of g-subdiffusion equations with the fractional Caputo time ...*	Chair
18.00 - 18.30	Sollich P.	*Exponential increase of transition rates in metastable systems driven by .....*	Field T.
18.30 - 18.50	Um J.	*Coherence-enhanced quantum-dot heat engine*	
18.50 - 19.10	Yuste S.B.	*Diffusion of an intruder in a molecular/granular gas as a random walk*	

ARIADNE HALL

	Area C	MAIN CONFERENCE	Monday 10
15.00 - 15.30	Boccaletti S.	*The transition to synchronization of networked systems*	Chair
15.30 - 15.50	Deroulers C.	*Surprising spatial profiles in steady flows of living cells which polarize to move*	Modanese G.
15.50 - 16.10	Gallo A.	*Strong, weak or no balance? Testing structural hypotheses against real networks*	
16.10 - 16.30	Kim G.	*Tradeoff of generalization error in unsupervised learning*	
16.30 - 16.50	Wilinski M.	*Network reconstruction from noisy and incomplete spreading dynamics*	
16.50 - 17.10	Malarz K.	Ranking sequences of continents and countries in affiliations of scientific papers ...	
17.10 - 17.30	Coffee break		
17.30 - 18.00	Modanese G.	Rewiring of scale-free networks vs. degree correlation properties	Chair
18.00 - 18.20	Neda Z.	Gintropic limits and scaling for the Hirsch index	Tadic B.
18.20 - 18.40	Ochab J.	Fractal and multifractal organisation of neuroimaging signals in cognitive tasks and...	
18.40 - 19.00	Xenikos D.	*Spatial effects on epidemics diffusion: Network topological characteristics leading ....*	
19.00 - 19.20	Tutajewski M.	*Classification of short-term memory tasks in ROI-based fMRI data*	

PASIPHAE HALL

	Workshop 1	Quantum Physics and Machine Learning	Monday 10
15.00 - 15.20	Caruso F.	*Quantum machine learning: overview and perspectives*	Chair
15.20 - 15.40	Barkoutsos P.	*Quantum scientific machine learning for multiphysics simulations*	Nowak M.
15.40 - 16.00	Peano V.	*How can a machine automatically discover better feedback strategies for quantum devices?*	
16.00 - 16.20	Pittorino F.	*Loss landscapes of neural networks through the lens of flat regions and symmetries*	
16.20 - 16.40	Ellinas D.	*Physics-informed neural network (PINN) for solving quantum master equation....*	
16.40 - 17.00	Tsironis G.	*Application of machine learning methods in the targeted energy transfer nonlinear model*	
17.00 - 17.30		Coffee break	
17.30 - 17.50	Marino R.	*Phase transitions in mini-batch size for sparse and dense deep neural networks*	Chair
17.50 - 18.10	Nowak M.	*From multiplicative matrix-valued diffusion to isometry of residual networks in....*	Caruso F.
18.10 - 18.30	Fuchizaki K.	*Can memory hysteresis in a neural network judge the continuity/discontinuity ....*	
18.30 - 18.50	Giampaolo S.M.	*Testing the neural network approach in the presence of topological frustration*	

THESEUS HALL

	Special Session 1	Spin glass theory and far beyond	Monday 10
15.00 - 15.20	Lucibello C.	*The exponential capacity of modern associative memories*	Chair
15.20 - 15.40	Boettcher S.	*Finite-size corrections in spin glasses and combinatorial optimization problems*	Leuzzi L.
15.40 - 16.00	Malatesta E.M.	*Structure and connectivity of solutions in non-convex continuous optimization ....*	
16.00 - 16.20	Contucci P.	*Disordered systems beyond the permutation symmetry paradigm*	
16.20 - 16.40	Mingione E.	*On a multiscale mean-field spin glass*	
17.00 - 17.30		Coffee break	
17.30 - 17.50	Leuzzi L.	*Spin-glass models for random lasers: how to expose the inner structure of the....*	Chair
17.50 - 18.10	Niedda J.	*Glass and pseudo-localization transitions in the Mode-Locked p-spin model for ....*	Martin-Mayor V.
18.10 - 18.30	Perrupato G.	*Theory of kinetically-constrained-models dynamics*	
18.30 - 18.50	Ricci-Tersenghi F.	*Surprises from the out-of-equilibrium dynamics of mean-field spin glasses*	
18.50 - 19.10	Bernaschi M.	*Large scale simulations of the Ising quantum spin glass transition*	
19.10 - 19.30	Nechaev S.	*Devil's staircase and modular invariance: from spectral statistics of random ...*	
19.30 - 19.50	Prykarpatski A.	*On integrable parametric generalization of the Kardar-Parisi-Zhang equation....*	

AMALTHEA HALL

	Workshop 8	Thermalization of Nonintegrable Many-Body Systems	Monday 10
14.30 - 14.55	Campbell D.	*The metastable state of the Fermi-Pasta-Ulam-Tsingoui (FPUT) problem*	Chair
14.55 - 15.20	Paleari S.	*Approximate integral of motion for macroscopic lattice systems*	Flach S.
15.20 - 15.45	Shimizu A.	*A key observable that guarantees linear thermalization of all macroscopic ....*	
15.45 - 16.10	Lepri S.	*Thermalization of isolated harmonic networks under conservative noise*	
16.10 - 16.30	Rumpf B.	*Cold discrete breathers*	
16.30 - 16.50	Danieli C.	*Dynamical chaos in the integrable Toda chain induced by time discretization*	
16.50 - 17.10	Chiba Y.	*Timescale of linear thermalization*	
17.10 - 17.30		Coffee break	
17.30 - 17.50	Flach S.	*Thermalization universality classes for weakly nonintegrable many-body ...*	Chair
17.50 - 18.10	Lando G.	*Thermalization of weakly non-integrable Josephson junction networks*	Campbell D.
18.10 - 18.30	Makris K.	*Optical thermodynamics of nonlinear systems*	
18.30 - 18.50	Christodoulidi H.	*Energy localisation and dynamics of a mean-field model with non-linear dispersion*	
18.50 - 19.10	Many Manda B.	*Nonlinear topological edge states: From dynamic delocalization to thermalization*	

MINOTAUR HALL

	Workshop 10	Non-Extensive Statistical Mechanics and Kappa Distributions	Monday 10
14.30 - 14.35		*Welcome / Introduction*	Chair
14.35 - 15.30	Tsallis C.	*Inanimate and living matter, Earth & outer space - Why are nonadditive....*	Summer D.
15.30 - 15.55	Zhdankin V.	*Generalized entropy production and nonthermal particle acceleration in ....*	
15.55 - 16.20	Ilić V.	*Statistical complexity of kappa distribution*	
16.20 - 16.45	Davis S.	*Temperature and its uncertainty in nonequilibrium steady state plasmas*	
16.45 - 17.10	Livadiotis G.	*Entropy defect in thermodynamics*	
17.10 - 17.30	Coffee break		
17.30 - 17.55	Summers D.	*Kappa distributions and power-law spectra in space plasmas*	Chair
17.55 - 18.20	Randol B.	*Possible explanation for power law tails of the solar wind ion distribution function....*	Nicolaou G
18.20 - 18.45	Pierrard V.	*Regularized kappa distributions to model the solar wind electrons*	
18.45 - 19.10	Arbutina B.	*Kappa distribution as a description of spectrum of supra-thermal particles at ....*	
19.10 - 19.30	Davelaar J.	*The usage of kappa distributions in the context of accreting black hole modeling*	
19.30 - 19.50	Zharkova V.	*Pitch-angle distribution of accelerated electrons in 3D current sheets with ....*	
19.50 - 20.10	Shen C.	*Nonthermal broadening of IRIS FeXXI line caused by turbulent plasma flows in ....*	

Tuesday, July 11, 2023

MINOS MAIN HALL

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

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	Break		
15.00 - 15.30	Gudowska-Nowak E.	*Freeness in cognitive science*	Chair
15.30 - 16.00	Hanel R.	*About a curious equivalence: Boltzmann Entropy as measure of information….*	Łuczka J.
16.00 - 16.20	Chacon-Acosta G.	*Fourth-order term effects in the Fick-Jacobs equation for diffusion in narrow….*	
16.20 - 16.40	Strecka J.	*Ising-Heisenberg diamond-decorated square lattice in a magnetic field: exact…*	
16.40 - 17.00	Gerasimenko V.	*On hierarchies of evolution equations for correlations of many quantum ….*	
17.00 - 17.30	Coffee break		
	Special Session 1	Spin glass theory and far beyond	
17.30 - 17.50	Kent-Dobias J.	*How to count in hierarchical landscapes: quenched complexity for the….*	Chair
17.50 - 18.10	Tonolo T.	*Marginal stability in the spherical spin-glass: on the competition between ….*	Ricci-Tersenghi F.
18.10 - 18.30	Martin-Mayor V.	*The mystery of rejuvenation and memory in spin-glasses*	
18.30 - 18.50	Paga I.	*On the Nature of Memory in spin glasses*	
18.50 - 19.10	Moreno-Gordo J.	*Numerical study of the six-dimensional Ising spin glass on a field*	
19.10 - 19.30	Nicoletti F.	*Low energy excitations in vector spin glasses*	
19.30 - 19.50	Cammarota C.	*Signal reconstruction in rough landscapes: The BBP transition and beyond*	

ARIADNE HALL

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

PASIPHAE HALL

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

THESEUS HALL

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

AMALTHEA HALL

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

MINOTAUR HALL

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

Wednesday, July 12, 2023

MINOS MAIN HALL

	Plenary	MAIN CONFERENCE	Wednesday 12
09.00 - 09.40	Löwen H.	*Inertial effects in active matter*	Chair
09.40 - 10.20	Geisel T.	*Musicians' Synchronization and the Mystery of Swing in Jazz*	Aharony A.
10.20 - 11.00	Marinari E.	*Memory and dreaming in the Hopfield model*	
11.00 - 11.30	Coffee break		

MINOS MAIN HALL

	Area A	MAIN CONFERENCE	Wednesday 12
11.30 - 12.00	Metzler R.	Long-range correlated processes: confinement, heterogeneity, & tempering	Chair
12.00 - 12.30	Jizba P.	*A new class of entropy-power-based uncertainty relations*	Ilić V.
12.30 - 12.50	Malarz K.	*Searching for universal formula for percolation threshold on two-dimensional ....*	
12.50 - 13.10	Morikawa M.	*A simple model of 1/f fluctuations from amplitude modulation and demodulation*	
13.10 - 13.30	Fang X.	*High-dimensional central limit theorem by Stein's method*	
13:30 - 15.00	Break		
15.00 - 15.30	Sollich P.	Bringing together two paradigms of non-equilibrium: Driven dynamics of aging	Chair
15.30 - 15.50	López J.M.	Lyapunov vectors and the energy levels of the directed polymer in random media	Malarz K.
15.50 - 16.10	Tsori Y.	*Generic mean-field model for phase transitions in nonuniform forces*	
16.10 - 16.30	Field T.	*Dynamics of an entangled state under random magnetic fields*	
16.30 - 16.50	Shchur L.	*Effect of anisotropy on critical temperature estimation using machine learning*	
16.50 - 17.10	Schreiber N.	*Ensemble dependence of the critical behavior of a system with long range ....*	
17.10 - 17.30	Coffee break		
	Workshop 3	Complex Networks: Hidden Geometry and Dynamics	Wednesday 12
17.30 - 18.00	Odor G.	*Higher-order interactions generate mixed order phase transition and Griffiths....*	Chair
18.00 - 18.30	Dankulov M.M.	*Complex networks analysis of time-series data: finding patterns in socio-.....*	Gupte N.
18.30 - 18.50	Liang X.S.	*Measuring the importance of individual units to the structure integrity of a ....*	
18.50 - 19.10	Hlinka J.	*Hidden geometry of brain dynamics revealed by persistent homology*	
19.10 - 19.30	Watorek M.	*Decomposition of cross-correlation networks by means of the concept of q-MST*	
19.30 - 20.00	Tadic B.	*Emergence of modulated cycles in critical dynamics*	

ARIADNE HALL

	Workshop 9	Fifty years of the renormalization group	Wednesday 12
11.30 - 12.00	Kosterlitz J.M.	Exact results from approximate theories at critical points from a renormalization ...	Chair
12.00 - 12.30	A. Aharony	Open questions on the random field Ising model	Beck C.
12.30 - 13.00	Delfino G.	Universality in nonequilibrium quantum dynamics	
13.00 - 13.30	Dudka M.	Phase transitions in three-dimensional random anisotropy Heisenberg magnets	
13:30 - 15.00	Break		
	Workshop 7	**Fluctuations in Physics**	**Wednesday 12**
15.00 - 15.20	Barkai E.	*Packets of spreading particles exhibit universal exponential tails*	Chair
15.20 - 15.40	Dantchev D.	*On ensemble dependence of fluctuation-induced forces: Exact results for ....*	Rubi M.
15.40 - 16.00	Farías C.	*Temperature distribution in finite systems: Application to the one-dimensional ....*	
16.00 - 16.20	Franosch T.	*Nonlinear response in dilute colloidal suspensions beyond the fluctuation-....*	
16.20 - 16.40	Ghim C.	*Anomalous relaxation of a brownian particle in active baths*	
16.40 - 17.00	Ghosh A.	*Coupled dynamical phase transitions in driven disk packings*	
17.00 - 17.30	Coffee break		
17.30 - 17.50	Morikawa M.	*Verifications of the origin of 1/f noise -Earthquakes, solar flare, and variable ....*	Chair
17.50 - 18.10	Rubi M.	*Stochastic resonance for an optimal transport of active particles*	Barkai E.
18.10 - 18.30	Oliveira F.	*Dynamics, fractal geometry and fluctuation-dissipation relations in the Kardar....*	
18.30 - 18.50	Mozyrsky D.	*Phase transition in fluctuations of interacting spins at infinite temperature*	
18.50 - 19.10	Mukherjee A.	*Dynamic correlations in the conserved Manna sandpile*	
19.10 - 19.30	Park H.	*Classical speed limit and finite-time Landauer's bound*	
19.30 - 19.50	Rodriguez-Fernandez E.	*Nonequilibrium critical dynamics: upturns from surface kinetic roughening*	
19.50 - 20.10	Reis F.	*Universal superdiffusion of random walks on lattices with low diffusivity fractal...*	

PASIPHAE HALL

	Area C	MAIN CONFERENCE	Wednesday 12
11.30 - 11.50	Burina E.	Modeling hybrid economic systems - money and tokens as incentives for ...	Chair
11.50 - 12.10	Colombini G.	*Equivalence of solitonic solutions in a neuron chain and single neuron delay ....*	Talbot J.
12.10 - 12.30	Saad D.	*Pandemics, marketing and opinion formation – the power of spreading processes*	
12.30 - 12.50	Kollas K.	*An improved indicator for causal interactions in non-linear systems*	
12.50 - 13.10	Lombardi F.	*Explaining the coexistence of oscillations and scale-free avalanches in resting ....*	
13.10 - 13.30	Mitsokapas E.	*Decision-making with distorted memory: Escaping the trap of past experience*	
13:30 - 15.00	Break		
	Special Session 2	**Entropies and Correlations in Complex Systems**	**Wednesday 12**
15.00 - 15.10		*Welcome words by the Special Session organizers*	Chair
15.10 - 15.40	Wada T.	*Nonlinear constitutive relations by using some deformed functions*	Jizba P.
15.40 - 16.10	Ván P.	*Extensivity of thermodynamic bodies, weak nonlocality of continua and ...*	
16.10 - 16.40	Quevedo H.	*Quasi-homogeneous black hole thermodynamics*	
16.40 - 17.10	Ilić V.	*Super-additivity, generalized concavity and quasi-homogeneity in non-additive systems*	
17.10 - 17.30	Coffee break		
17.30 - 18.00	Tirnakli U.	*Characterization of degree and energy distributions in asymptotically ...*	Chair
18.00 - 18.30	Tsallis C.	*Statistical mechanics for complex systems – news and views*	Loos S.
18.30 - 19.00	Beck C.	*Heavy-tailed distributions from superstatistics: Recent applications for power ...*	
19.00 - 19.20	Somazzi A.	*Learn your entropy from informative data: an axiom ensuring the consistent ...*	
19.20 - 19.40	Srdinsek M.	*Rényi entropy of quantum anharmonic chain at non-zero temperature*	
19.40 - 20.00	Barbosa F.	*Residual entropy in the repulsive one-dimensional lattice model of liquid water*	

THESEUS HALL

	Workshop 4	Climate and Environments	Wednesday 12
11.30 - 11.50	Livina V.	*Statistical physics approach in tipping point analysis*	Chair
11.50 - 12.10	Ludescher J.	*Forecasting El Niño well before the spring predictability barrier*	Blesic S.
12.10 - 12.30	Yuan N.	*On the global warming projection: a new approach based on scaling theory*	
12.30 - 12.50	Wang B.	*Assessing the impact of climate change on fungal pathogens and insect pests ....*	
12.50 - 13.10	Blesic S.	*Characterization of meteorological drivers for incidences of malaria in South Africa*	
13.10 - 13.30	Bianucci M.	*Linear or Nonlinear Modeling for ENSO Dynamics?*	
13:30 - 15.00	Break		
15.00 - 15.20	Venturi D.	*Approximation of functional differential equations*	Chair
15.20 - 15.40	Liang X.S.	*Causality as a real physical notion ab initio, and causality analysis in climate and...*	Hristopulos D.
15.40 - 16.00	Žukovič M.	*Spin models for efficient prediction of massive spatial data*	
16.00 - 16.20	Nerantzaki S.	*Interpolation of large precipitation fields with space and space-yime stochastic...*	
16.20 - 16.40	Hristopulos D.	*Botzmann-Gibbs distributions and applications to data-driven modeling*	
16.40 - 17.00	Reis F.	*Modeling the deep abiotic weathering of pyrite*	
17.00 - 17.30	Coffee break		
17.30 - 17.50	Zharkova V.	*Periodicities in solar activity, solar radiation and their links with terrestrial ....*	Chair
17.50 - 18.10	Gentili S.	*A machine learning approach for strong aftershock forecasting by the NESTORE...*	Zukovic M.
18.10 - 18.30	Marder M.	*Solvable model for the decline of unconventional oil and gas*	

AMALTHEA HALL

	Workshop 5	Statistical Physics of Biophysical Systems	Wednesday 12
11.30 - 12.00	Fedotov S.	*Ensemble self-reinforcement and strong memory effects for the anomalous ...*	Chair
12.00 - 12.23	Deo N.	*Mutations in Protein Family Networks*	Hatzikirou H.
12.23 - 12.45	Fiasconaro A.	*Analytical extension/force curve of the freely jointed chain (FJC) and the ...*	
12.45 - 13.07	Sung B.	*The non-equilibrium nature of the packaging and the ejection processes of viral DNA*	
13:10 - 15.00	Break		
15.30 - 15.53	Baek Y.	*Symmetry-breaking motility and diffusion of a porous object immersed in an...*	Chair
15.53 - 16.16	Frydel D.	*The entropy production rate for active matter*	Deutsch A.
16.16 - 16.39	Hatzikirou H.	*On a theory of cell decision-making for multicellular systems*	
16.39 - 17.02	Sung J.	*Nonclassical Chemical Dynamics in Living Cells and Complex Material Systems*	
17.10 - 17.30	Coffee break		
17.30 - 18.00	Deutsch A.	*Cancer invasion and progression: insights from agent-based models*	Chair
18.00 - 18.23	Po H.F.	*Inferring structure from firing patterns of cortical neural networks*	Fedotov S.
18.23 - 18.45	Spiliotis K.	*Combining topological data analysis with equation-free methods to analyse ...*	
18.45 - 19.08	Corominas-murtra B.	Phase transitions in embryo morphogenesis	

MINOTAUR HALL

	Area B	MAIN CONFERENCE	Wednesday 12
11.30 - 12.00	Hyeon C.	*Irregularity of polymer domain boundaries in two dimensional polymer solution*	Chair
12.00 - 12.20	Constantoudis V.	*The challenge of nanostochasticity: Complexity concepts and methods in the....*	Spicka V.
12.20 - 12.40	Papia E.-M.	*Entropy and complexity analysis of AI-generated and human-made paintings*	
12.40 - 13.00	Kim K.-W.	*Monte Carlo method for active particle dynamics with thermodynamic consistency*	
13.00 - 13.20	Lauditi C.	*Learning through atypical "phase transitions" in overparameterized neural ....*	
13:20 - 15.00	Break		
	Workshop 10	Non-Extensive Statistical Mechanics and Kappa Distributions	Wednesday 12
15.00 - 15.25	Kourakis I.	*Nonlinear electrostatic waves in non-Maxwellian space plasmas: overview of....*	Chair
15.25 - 15.45	Lazarides N.	*Coupled electrostatic wavepackets in plasmas: on the role of kappa-distributed....*	Viviane P.
15.45 - 16.10	Munoz V.	*Parametric decays of electromagnetic waves in electron-positron nonextensive...*	
16.10 - 16.30	Qureshi N.	*Electromagnetic ion cyclotron waves and associated ion velocity distributions: ....*	
16.30 - 16.50	Da Silveira F.	*Langmuir waves in kappa plasmas*	
16.50 - 17.10	Yoon P.	*Generation of regularized kappa electron velocity distribution function by ....*	
17.10 - 17.30	Coffee break		
17.30 - 18.00	Consolini G	*Markov features and kappa distribution of magnetic field fluctuations at ion/sub....*	Chair
18.00 - 18.20	Dialynas K.	*Energetic H+ and O+ Moments and Polytropic Index in the Kronian Magnetosphere...*	Gkioulidou M.
18.20 - 18.40	Ntormousi E.	*Global MHD galaxy simulations: feedback, non-equilibrium chemistry and the ....*	
18.40 - 19.05	Vallianatos F.	*Gutenberg-Richter, Omori and Cumulative Benioff strain patterns in view of ....*	
19.05 - 19.25	Ellinas D.	*Quantum computational approach based on quantum κ-entropy*	
19.25 - 19.45	Kalogeropoulos N.	*Power law entropies for parabolic systems?*	
19.45 - 20.10	Sarlis N.	*Recent advances on statistical physics of earthquakes by combining natural time....*	

Thursday, July 13, 2023

MINOS MAIN HALL

	Plenary	MAIN CONFERENCE	Thursday 13
09.00 - 09.40	Dandouras I.	*Atmospheric ion escape: contribution to the early evolution of the terrestrial atmosphere*	Chair
09.40 - 10.20	Hoshino M.	*Nonthermal particle acceleration and energy partitioning of thermal and nonthermal…*	Ruppeiner G.
10.20 - 11.00	Dasgupta C.	*Glassy dynamics and jamming in persistent active matter*	
11.00 - 11.30	Coffee break		

MINOS MAIN HALL

	Area A	MAIN CONFERENCE	Thursday 13
11.30 - 11.50	Niemi A.	*Molecular motors and Brownian time crystals*	Chair
11.50 - 12.10	Nikoletatos N.	*Nonlinear and non-local FPK equation for probabilistic response of nonlinear systems ….*	Wada T.
12.10 - 12.30	Nowak M.	*Eikonal formulation of large dynamical random matrix models*	
12.30 - 12.50	Curado E.	*Relativistic gas: Lorentz-invariant distribution for the velocities*	
12.50 - 13.10	Johal R.	*Spin based Quantum Otto engines and majorization*	
13:10 - 15.00	Break		

ARIADNE HALL

	Area B	MAIN CONFERENCE	Thursday 13
11.30 - 11.50	Maciolek A.	*Continuous non-equilibrium transition driven by the heat flow*	Chair
11.50 - 12.10	Obliger A.	*Volterra equations to compute memory kernels and projected cross-correlation….*	da Silva S.L.
12.10 - 12.30	Katsavrias C.	*Acceleration and loss of relativistic electrons in the outer radiation belt:….*	
12.30 - 12.50	Qiao Z.	*Integrable peakon models - Scalar case*	
13:00 - 15.00	Break		
15.00 - 15.20	Trombettoni A.	*Ultracold atoms for quantum sensing and quantum technologies*	Chair
15.20 - 15.40	Edet C.	*Entropy production rate of a nonlinear hybrid quantum optomechanical system*	Maciolek A.
15.40 - 16.00	Tamburrini A.	*Non-equilibrium statistical mechanics tool for the study of space plasma; ….*	
16.00 - 16.20	Defenu N.	*Effective theories in quantum dynamics: the Kibble-Zurek mechanism*	
16.20 - 16.40	Subashri V.	*Exact calculation of the probabilities of rare events in cluster-cluster aggregation*	
17.00 - 17.30	Coffee break		

PASIPHAE HALL

	Area C	MAIN CONFERENCE	Thursday 13
11.30 - 11.50	Watanabe H.	*Empirical observations of ultraslow diffusion driven by the fractional dynamics in languages.*	Chair
11.50 - 12.10	Torrisi G.	*Inference of Boolean networks from perturbation data*	Kovacs I.
12.10 - 12.30	Bazzani A.	*Stochastic dynamics on graphs and congestion in transport systems: predictive models and..*	
12.30 - 12.50	Wątorek M.	*Nonlinear correlations in EEG signals*	
12.50 - 13.10	Papp I.	*Synchronization and criticality in brain models*	
13:10 - 15.00	Break		
	Special Session 2	Entropies and Correlations in Complex Systems	Thursday 13
17.10 - 17.30	Coffee break		
17.30 - 18.00	Campa A.	*Synchronization properties of noisy coupled Kuramoto oscillators under ...*	Chair
18.00 - 18.30	Loos S.A.M.	*Stochastic thermodynamics of a particle in a correlated field*	Hannel R.
18.30 - 19.00	Corominas-Murtra B.	*Typicality, stochastic dynamics and generalized statistical mechanics*	
19.00 - 19.20	Bohinc K.	*Orientational ordering of molecules near a charged spherical surface*	
19.20 - 19.40	Olguín-Arias V.	*A statistical approach to diffusion and waiting times in the problem of melting solids*	
19.40 - 20.00	Aizenman M.	*A dichotomy for planar loop systems with implications for classical and quantum ....*	

THESEUS HALL

	Special Session 3	Holographic and other cosmologically relevant entropies	Thursday 13
11.30 - 11.40		*Welcome words by the Special Session organizers*	Chair
11.40 - 12.00	Saridakis E.N.	*Gravity-thermodynamics connection and holographic dark energy, with generalized entropies*	Kirchner S.
12.00 - 12.30	Tsallis C.	*Extensive nonadditive entropies for black holes and cosmology*	
12.30 - 12.50	Smaldone L.	*Bekenstein bound from the Pauli principle*	
12.50 - 13.10	Luciano G.	*Baryon asymmetry from Barrow entropy: theoretical predictions and observational ....*	
13:00 - 15.00	Break		
15.00 - 15.20	Beck C.	*Information shift dynamics described by Tsallis q=3 entropy on a compact phase ...*	Chair
15.20 - 15.40	Jizba P.	*Decoherence limit of quantum systems obeying generalized uncertainty principle: new ...*	Saridakis E.N.
15.40 - 16.00	Zamora J.	*Thermodynamical consistency of entropic cosmological models*	
16.00 - 16.20	Kirchner S.	*Probing quantum phase transitions through entropy in boundary-critical models*	
16.20 - 16.40	Ván P.	*Classical holography*	
16.40 - 17.00	Giaccari S.G.	*Renormalization group irreversibility in conformal gravity*	
17.00 - 17.30	Coffee break		

AMALTHEA HALL

	Special Session 4	Quantum Long-Range Systems	Thursday 13
11.30 - 11.50	Trombettoni A.	*Criticality and Phase Diagram of Quantum Long-Range Systems*	Chair
11.50 - 12.10	Campa A.	*The unconstrained ensemble and its use in the study of quantum and classical nonadditive...*	Trombettoni A.
12.10 - 12.30	Marcos B.	*Experimental observation of violent relaxation and the formation of out-of-equilibrium...*	
12.30 - 12.50	Defenu N.	*Long-range interacting quantum systems*	
12.50 - 13.10	Giuliano D.	*Current transport properties and phase diagram of a Kitaev chain with long-range pairing*	
13:10 - 15.00	Break		

MINOTAUR HALL

	Workshop 10	Non-Extensive Statistical Mechanics and Kappa Distributions	Thursday 13
11.30 - 12.00	Antiochos S.	*The self-organization of the sun's corona*	Chair
12.00 - 12.25	Fleishman G.	*Solar flare science with microwave imaging spectroscopy*	Elliott H.
12.25 - 12.50	Dzifčáková E.	*Effects of electron density and multiple ionization on the ionization equilibrium - the....*	
12.50 - 13.10	Zhong J.	*Turbulence magnetic reconnection experiments driven by intense lasers*	
13.10 - 13.30	Gontikakis C.	*Emission measure analysis of the transition region of solar flare structures*	
13:30 - 15.00	Break		
15.00 - 15.25	Dandouras I.	*Space plasma physics from Moon orbit: opportunities provided by the Lunar Gateway*	Chair
15.25 - 15.45	Dayeh M.	*Polytropic behavior in the substructure of interplanetary Coronal Mass Ejections*	Livadiotis G.
15.45 - 16.05	Starkey M.	*Polytropic behavior in the compressed solar wind*	
16.05 - 16.25	Hristopulos D.	*Applications of Kaniadakis functions beyond statistical mechanics*	
16.25 - 16.50	Nicolaou G.	*Kappa Distributions in space plasmas: Review of methods and applications*	
16.50 - 17.10	Livadiotis G.	*Kappa distributions: Connection with thermodynamics*	
17.10 - 17.30	Coffee break		

LABYRINTHUS

	Poster Session	Thursday 13
17.30 - 19.00		

Friday, July 14, 2023

MINOS MAIN HALL

	Plenary	MAIN CONFERENCE	Friday 14
08.20 - 09.00	Rubi M.	*Entropic transport in confined soft-matter and biological systems*	Chair
09.00 - 09.40	Ruppeiner G.	*Pure fluids to black holes: thermodynamics probes microstructures*	Metzler R.
09.40 - 10.20	Barkai E.	*Boltzmann-Gibbs statistics meets infinite ergodic theory*	
10.20 - 11.00	Campbell D.	*The Fermi Pasta Ulam Tsingou (FPUT) paradox: The birth of nonlinear science*	
11.00 - 11.30	Coffee break		

MINOS MAIN HALL

	Plenary	Closing Ceremony	Friday 14
11.30 - 12.00	Kaniadakis G.	*Sigmaphi awards*	Chair Argyrakis P.

Thursday, July 13, 2023

LABYRINTHUS

Poster section

Posters will be exposed in the LABYRINTHUS ROOM from Monday 08.30

Poster discussion will be held Thursday from 17.30 - 19.00

Abbasiv M.M.	***Nonlinear ion acoustic waves in dissipative and dispersive magneto-rotating relativistic plasmas with two....***
Camporeale C.	***A mesoscopic numerical approach to active matter***
Cao García F.J.	***Dispersal-induced resilience to stochastic environmental fluctuations in populations with Allee effect***
Cao García F.J.	***Predictability of population fluctuations***
Capolupo A.	***Fermion mixing in curved spacetime and dark matter***
Chang R.	***Application of nonequilibrium thermodynamics to polymer collapse dynamics***
Contreras Reynoso A.	***Normal quantum channels***
Crespo M. R.	***Single-stranded DNA-binding protein kinetics: theory and experiments.***
da Silva S.L.	***A κ-generalized Wasserstein metric in the graph-space for seismic waveform inversion issues***
Demyanenko E.	***Measuring the simplicity of neural networks as a function of overparametrization***
Du Plessis J.-J.	***Instantaneous Lyapunov Vectors in DNA***
Fuchizaki K.	***A new universal dynamics preceding the early stage of spinodal decomposition***
García de Soria M.I.	***Kinetic theory of a confined quasi-one-dimensional gas of hard disks***
Gergely A.	***Fluctuations of CO2 concentration inside a mofette long-term, high-frequency monitoring and a simple model.***
Gervino G.	***Direct nuclear cross section measures at Big Bang energies andthe cosmological lithium problem***
Gervino G.	***Human health risk estimation from indoor radon measurements***
Giannakis O.	***TACTICIAN: AI-based applications for knowledge extraction from ESA's missions' scientific publications***
Grande M.A.F.	***Information in feedback ratchets***
Haldar A.	***Active XY model on a substrate: Density fluctuations and phase ordering***
Horizumi K.	***The gradient-flow equations in information geometry and electric circuits.***
Janarek J.	***How do strokes affect the brain's critical state? Structural and functional aspects of the loss of connectome ....***
Johal R.	***Thermoelectric generator in endoreversible approximation: The effect of heat-transfer law under finite physical ....***
Karlova K.	***Frustrated magnetism of a quantum mixed spin-(1, 1/2) Heisenberg octahedral chain from a statistical- ....***
Kelemen S.	***Handling incomplete information: Gini coefficient from coarse-grained data***
Király B.	***A game-theory-inspired reinvestigation of the Blume–Capel model***
Knap J.	***Physical consequences of non-additive and non-extensive entropies***
Krasnytska M.	***Potts model with invisible states: changeover to the percolation transition***
Krasnytska M.	***Individual bias and fluctuations in collective decision making: analytical results and simulations***
Krishnan G.	***Relaxation dynamics in classical and quantum supercooled liquids***
Łepek M.	***Can we predict performance of diffusion source localization using navigability?***
Mohylna M.	***Skyrmion phase in a frustrated triangular lattice with next-nearest neighbours***
Palmisano C.	***Bayesian expectation of the mean power of several gaussian data***
Paraskakis N.	***Modeling the number of sunspots using machine learning***
Quaranta A.	***Axion-like particles and fifth force with neutron interferometry***
Ramírez Yañez A.	***Studying the stability of a quantum chaotic system at finite temperature via coupling to a 2-level probe***
Ravoni A.	***Thermodynamic efficiency of autocatalytic networks***
Sáinz-agost A.	***Polymer translocation driven by transversal and time-dependent end-pulled forces.***
Samboni B V.A.	***Anomalous sedimentation of erythrocytes in dilute solutions***
Separdar L.	***Nucleation kinetics in supercooled ZnSe: Computer simulation data corroborate the validity of the classical ....***
Serao R.	***Phenomenological implications of nonlocal electrodynamics***
Sirbu A.	***Interplay between algorithmic bias and external information effects in opinion dynamics with bounded confidence***
Sourpis A.	***The effect of strong electric field in case of Acetonitrile and Water mixtures***
Taha Sant'Ana F.	***Correlation aspects of interacting quantum systems in one dimension***
Vargas Carmona J.A.	***Scattering in quantum graphs***
Villaluenga J.C.	***Spatial scales of population synchrony generally increases as fluctuations propagate in a two species ecosystem***
Wójcik D.	***Magnetospheric multiscale observations of kappa distributions in the magnetosheath on small scales***
Zhdankin V.	***Dimensional measures of generalized entropy for statistical physics***