

# Thursday, July 13, 2023

## MINOS MAIN HALL

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

## MINOS MAIN HALL

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

## ARIADNE HALL

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

## PASIPHAE HALL

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

## THESEUS HALL

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

## AMALTHEA HALL

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

## MINOTAUR HALL

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

## LABYRINTHUS

Poster Session		Thursday 13
17.30 - 19.00		