

DGP24 - Pisa June 5-8, 2024 - Program

Time	Event	Speaker	Title/Topic
DAY #1- June 5th, 2024			
8:30-9:00	Opening and registration		
9:00-9:30	Welcome speeches	<ul style="list-style-type: none"> • Frida Scarpa - City Council of Pisa • Benedetta Mennucci - Università di Pisa • Andrea Roventini - Scuola Superiore Sant'Anna Pisa • Fabrizio Lillo - Scuola Normale Superiore Pisa • Fabio Recchia - Area della Ricerca del CNR Pisa • Paolo Grigolini - University of North Texas 	
9:30-9:50	Talk #1	Benedetta Mennucci - <i>Università di Pisa, IT</i>	Towards an atomistic view of light-driven processes in biology
9:50-10:10	Talk #2	Giorgio Scita - <i>IFOM, IT</i>	Tissue fluidification in pathophysiology
10:10-10:30	Talk #3	Arti Ahluwalia - <i>Università di Pisa, IT</i>	Lab on a Laptop for investigating spheroid morphology and coexistence
10:30-11:00	Coffee-break		
11:00-11:20	Talk #4	Davide Usula - <i>Scuola Superiore Sant'Anna Pisa, IT</i>	Phases of Distributive Conflict and Inflation Spirals
11:20-11:40	Talk #5	Nicola Pedreschi - <i>Oxford University, UK</i>	The temporal rich club phenomenon
11:40-12:00	Talk #6	Michele Giusfredi - <i>Università di Firenze, IT</i>	Localization in boundary-driven lattice models
12:00-12:20	Talk #7 online	Stefano Boccaletti - <i>ISC-CNR, IT</i>	The transition to synchronization of networked dynamical systems
12:20-12:40	Talk #8	to be assigned	

12:40-13:00	Talk #9	Marco Bianucci - <i>ISMAR-CNR, IT</i>	Generalized Cumulants and Lie-Evolution of operators: a versatile approach for Statistical Physics. Examples of applications including Geophysics/Climatel models
13:00-14:30	Lunch		
14:30-14:50	Talk #10 online	Giuseppe Longo - <i>École Normale Supérieure de Paris, FR</i>	Extended criticality
14:50-15:10	Talk #11 online	Mauro Bologna <i>Universidad de Tarapacá, CH</i>	Fractional calculus
15:10-15:30	Talk #12	Francesco Mainardi - <i>Università di Bologna, IT</i>	An application of fractional calculus: from diffusion to wave propagation
15:30-15:50	Talk #13	Louis Roberto Evangelista	Fractional Calculus as a Tool for Applications in Soft Matter: Electrical Impedance Response of Materials
15:50-16:10	Talk #14	Bruce West - <i>University of North Texas, US</i>	Fractional calculus
16:10-16:30	Talk #15	to be assigned	
16:30-17:30	Coffee-break and poster session		

DAY #2- June 6th, 2024

9:00-9:10	Opening and registration		
9:10-9:30	Talk #16	Francesco Carli, <i>Università di Pisa, IT</i>	Learning and actioning general principles of cancer cell drug sensitivity
9:30-9:50	Talk #17	Elena Levantini, <i>ITB-CNR, IT</i>	From Genes to Networks: Exploring the Intricacies of Lung Cancer through Single-Cell Transcriptomics
9:50-10:10	Talk #18	Chiara M. Mazzanti, <i>Fondazione Pisana per la Scienza, IT</i>	Innovative dynamic stratification in glioblastoma: analyzing tumor cell characteristics and mobility strategies through single cell behavior live imaging (ScBLI)
10:10-10:30	Talk #19	Leonardo Martinelli - <i>Università di Pisa, IT</i>	Network Model Replicates Personalized Brain Dynamics in Autism Spectrum Disorder
10:30-11:00	Coffee-break		

11:00-11:20	Talk #20 online	Nils Gauthier - <i>IFOM, IT</i>	Invasive gliomas: Motility behaviors and mechanical properties
11:20-11:40	Talk #21	Ranieri Bizzarri - <i>Università di Pisa, IT</i>	Optical nanoscopy to understand the biology of biological condensates
11:40-12:00	Talk #22	Alessandro Torcini - <i>CY Cergy Paris Université, FR</i>	A robust balancing mechanism for spiking neural networks in absence of strong external currents
12:00-12:20	Talk #23	Mimma Nardelli - <i>Università di Pisa, IT</i>	ComEDA and MComEDA: new tools for the assessment of complex electrodermal activity dynamics
12:20-12:40	Talk #24	Marco Cafiso / Paolo Paradisi, <i>Università di Pisa, IT</i>	Complexity of a bio inspired Hopfield-type neural network: random vs. scale-free connectivity
12:40-13:00	Talk #25	Chiara Magliaro - <i>Università di Pisa, IT</i>	Mini-Brains, Big Opportunities: Navigating the Frontiers of Cerebral Organoids
13:00-14:30	Lunch		
14:30-14:50	Talk #26 online	Bertram Duering - <i>Warwick University, UK</i>	Kinetic exchange models of societies and economies
14:50-15:10	Talk #27	Maurizio Benfatto /Elisabetta Pace - <i>INFN, IT</i>	Biophotons: a hard problem
15:10-15:30	Talk #28	Paolo Freguglia - <i>Università de L'Aquila, IT</i>	On the corporate organization. A proposal
15:30-15:50	Talk #29	to be assigned	
15:50-16:10	Talk #30	Daniele Giachini - <i>Scuola Superiore Sant'Anna Pisa , IT</i>	Pricing anomalies in a general equilibrium model with biased learning
16:10-16:30	Talk #31	Andrea Antico - <i>Scuola Superiore Sant'Anna Pisa , IT</i>	The Effect of Market Selection on Pricing Patterns in a General Equilibrium Model with Behavioural Biases
16:30-17:30	Coffee-break and poster session		

DAY #3- June 7th, 2024

9:00-9:10	Opening and registration
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9:10-9:30	Talk #32	Giulio Rossetti - <i>ISTI-CNR, IT</i>	Mass media impact on opinion evolution in biased digital environments
9:30-9:50	Talk #33	Andrea Scarciglia - <i>Università di Pisa, IT</i>	Stochastic Coupling Estimation in Multivariate Dynamical Systems
9:50-10:10	Talk #34	Antonio Politi - <i>Aberdeen University - UK</i>	Origin of metastable negative-temperature states in DNLS-type models
10:10-10:30	Talk #35	Stefano Lepri - <i>ISC-CNR, IT</i>	Large-deviations approach to thermalization: the case of harmonic chains with conservative noise
10:30-11:00	Coffee-break		
11:00-11:20	Talk #36	Umberto Cherubini - <i>Università di Bologna, IT</i>	Consumption Skewness, Time Deformation and the Term Structure
11:20-11:40	Talk #37	Andrea Vandin - <i>Scuola Superiore Sant'Anna Pisa, IT</i>	Model reduction for complex non-linear dynamical systems
11:40-12:00	Talk #38	Guido Germano - <i>University College of London - UK</i>	Stochastic volatility models with stochastic interest rates
12:00-12:20	Talk #39	Enrico Scalas - <i>Sapienza Università di Roma, IT</i>	Probabilistic methods for economic modeling
12:20-12:40	Talk #40 online	Maksim Kitsak - <i>Technical University Delft - NL</i>	Finding shortest and nearly shortest path nodes in large substantially incomplete networks by hyperbolic mapping
12:40-13:00	Talk #41	Lorenzo Gaetano Amato - <i>Scuola Superiore Sant'Anna Pisa, IT</i>	Brain network dynamics in health and disease
13:00-14:30	Lunch		
14:30-14:50	Talk #42	Luca Dini - <i>ILC-CNR, IT</i>	Enhancing Neural Language Models with Human Reading Behaviour
14:50-15:10	Talk #43	Fabrizio Lillo - <i>Scuola Normale Superiore Pisa, IT</i>	Online learning of order flow and market impact
15:10-15:30	Talk #44	Giorgio Rizzini - <i>Scuola Normale Superiore Pisa, IT</i>	Modelling shock propagation and resilience in financial temporal networks
15:30-15:50	Talk #45	Francesco Marino - <i>INO-CNR, IT</i>	Kelvin-Helmholtz instability in quantum fluids as an emergent phenomenon

15:50-16:10	Talk #46	Alberto Ortolani - <i>IBE-CNR, IT</i>	Climate complexity
16:10-16:30	Talk #47	Best Poster Award	Flash talks
16:30-17:30	Coffee-break and poster session		
DAY #4- June 8th, 2024			
9:00-9:10	Opening and registration		
9:10-9:30	Talk #48	Franco Flandoli - <i>Scuola Normale Superiore Pisa, IT</i>	A difficult Dynamical System question arising in Climate Change
9:30-9:50	Talk #49	Marta Leocata - <i>LUISS, IT</i>	Climate and Economics
9:50-10:10	Talk #50	Sandro Vaienti - <i>Université de Toulon - FR</i>	Quasi-ergodicity
10:10-10:30	Talk #51	Matteo Tanzi - <i>King's College London, UK</i>	Selfconsistent Transfer Operators: Existence and stability of fixed points in presence of strong coupling
10:30-11:00	Coffee-break		
11:00-11:20		Marcello Buiatti Memorial Thesis Award Presentation	
11:20-11:40	Talk #52	Angelo Vulpiani - <i>Sapienza Università di Roma</i>	Remarks on chaos in classical and quantum mechanics
11:40-12:00	Talk #53	Andrea Ortone - <i>Scuola Superiore Sant'Anna Pisa, IT</i>	Beta oscillators interplay in a model of parkinsonian Basal Ganglia
12:00-12:40	Talk #54	Marcello Buiatti Thesis Award	winners talks
12:40-13:00	Talk #55	Massimo Stella - <i>University of Trento, IT</i>	Cognitive modelling of concepts in the mental lexicon with multiplex networks: Insights and advancements
13:00-14:30	Lunch		

14:30-14:50	Talk #56	Fabio Vanni - <i>Università dell'Insubria, IT</i>	Aging and Exchangeability
14:50-15:10	Talk #57	Herbert Jelinek - <i>Kahlifa University, AE</i>	Mind over Matter: Physiological Response to Tibetan Singing Bowls and Effect on Inter-individual Complexity Matching
15:10-15:30	Talk #58 online	Harvey Brenner Memorial Lecture by Elke Heckner - <i>Iowa University, USA</i>	Social Complexity and the Social Mind.
15:30-15:50	Talk #59	Paolo Grigolini - <i>University of North Texas, USA</i>	Complexity form physics to social sciences
15:50-16:10	round table	Complexity Today, moderated by Paolo Grigolini	
16:10-16:30	closing remarks		
16:30-17:30	Farewell coffee-break		