

Wednesday, 6 SEPTEMBER

8:30-9:00	Registration	
9:00-9:30	Welcome	
9:30-11:10	M1 Morning session 1	
(25 min)	Johannes Schneider, Peter Eggenberger Hotz, William David Jamieson, Alessia Faggian, Jin Li, Hans-Georg Matuttis, Adriano Caliari, Mathias Weyland, Dandolo Flumini, Aitor Patino Diaz, Silvia Holler, Federica Casiraghi, Lorena Cebolla Sanahuja, Martin Hanczyc, David Barrow, Pantelitsa Dimitriou, Oliver Castell and Rudolf M. Fuchsli	Kauffman Model with Spatially Separated Ligation and Cleavage Reactions
(25 min)	Irene Garcia, Bessem Chouaia, Mercè Llabrés, Pere Palmer-Rodriguez and Marta Simeoni	Analysing the expressiveness of metabolic networks representations
(25 min)	Marco Villani, Matteo Balugani and Roberto Serra	The properties of pseudo-attractors in random Boolean networks
(25 min)	Bruno Galuzzi and Chiara Damiani	scFBAPy: a Python framework for super-network Flux Balance Analysis
11:10-11:40	Coffee break	
11:40-13:20	M2 Morning session 2	
(25 min)	Jj Merelo and M. Cristina Molinari	The complex networks of the Republic of Venice
(25 min)	Thierry Njougouo, Carletti Timoteo, Andreagiovanni Reina and Elio Tuci	On the role of zealots in a best-of-n problem on a network. An analytical approach.
(25 min)	Jj Merelo	Self-loops in social networks: behavior of eigenvector centrality
(25 min)	Riccardo Righi	Does `community detection analysis' find real communities? A statistical evaluation based on complex networks methods
13:20 - 14:30	Lunch	
14:30-15:30	KEYNOTE SPEECH: Joana C. Xavier	
15:30-16:20	A1 Afternoon Session 1	
(25 min)	Giandomenico Spezzano, Cicirelli Franco, Andrea Vinci, Antonio Guerrieri, Antonio Gentile and Emilio Greco	Blockchain-Empowered PSO for Scalable Swarm Robotics
(25 min)	Giulia Magnani, Monica Mordonini and Stefano Cagnoni	GP/PSO-based embedding of 1-D signals in an auto-encoder fashion
16:20-16:45	Coffee break	
16:45-18:00	A2 Afternoon Session 2	
(25 min)	Maria Mannone, Norbert Marwan, Valeria Seidita, Antonio Chella, Achille Giacometti and Peppino Fazio	Entangled Gondolas. Design of Multi-Layer Networks of Quantum-Driven Robotic Swarms
(25 min)	Dari Trendafilov, Ahmed Almansoori, Timoteo Carletti and Elio Tuci	Generalize or perish: Communication range-Time-Accuracy trade-offs in swarm collective perception
(25 min)	Claudia Cavallaro, Vincenzo Cutello, Mario Pavone and Francesco Zito	A Tabu Search Algorithm for the Map Labeling Problem

Thursday, 7 SEPTEMBER

9:00-11:05	M3 Morning session 3	
(25 min)	Veronica Distefano, Maria Mannone, Irene Poli and Gert Mayer	Clustering Trajectories to study Diabetic Kidney Disease
(25 min)	Debora Slanzi, Claudio Silvestri, Irene Poli and Gert Mayer	Exploiting the potential of Bayesian networks in deriving new insight into Diabetic Kidney Disease (DKD)
(25 min)	Ignacio Rojas-Valenzuela, Ignacio Rojas and Olga Valenzuela	Multi-objective Genetic Algorithm for Robust Biomarker Selection in Cancer Problems using RNA-Seq Samples.
(25 min)	Tiziana D'Alessandro, Claudio De Stefano, Francesco Fontanella, Emanuele Nardone and Alessandra Scotto di Freca	A genetic algorithm for feature selection for Alzheimer's Disease Detection Using a Deep Transfer Learning Approach
(25 min)	Ignacio Rojas-Valenzuela, Ignacio Rojas and Olga Valenzuela	Multi-Classification of Alzheimer's Disease by NSGA-II Slices Optimization and Fusion Deep Learning
11.05-11:30	Coffee break	
11:30-12.45	M4 Morning session 4	
(25 min)	Lorenzo Del Moro, Maurizio Magarini and Pasquale Stano	On the Evaluation of Observed Semantic Information in Synthetic Cells
(25 min)	Uri Hershberg	Biomimetic design "manifesto" - suggesting new metrics for measuring bio function
(25 min)	Roger Jones and Alan Jones	Programming in vivo molecular computers with entropy flow and ascribed goals for natural selection
12:45-14:00	Lunch	
14:00-15:40	A3 Afternoon Session 3	
(25 min)	Michele Braccini, Paolo Baldini and Andrea Roli	An investigation of graceful degradation in Boolean network robots subject to online adaptation
(25 min)	Luisa Damiano and Pasquale Stano	General Lines, Routes and Perspectives of Wetware Embodied AI. From its Organizational Bases to a Glimpse on Social Chemical Robotics
(25 min)	Sanyam Jain, Aarati Shrestha and Stefano Nichele	Capturing Emerging Complexity in Lenia
(25 min)	Tatyana Kim and Ryhor Prakapovich	Influence of the Formation of the Remuneration Function Training with Connections
15:40-16:00	Coffee break	
16:00-17:15	A4 Afternoon Session 4	
(25 min)	Jørgen Jensen Farner, Ola Huse Ramstad, Stefano Nichele and Kristine Heiney	Beyond weight plasticity: Local learning with propagation delays in spiking neural networks
(25 min)	Jj Merelo, Mario Garcia Valdez and Pedro Castillo	Energy consumption of evolutionary algorithms in JavaScript
(25 min)	Christoph Zaugg, Peter Bolt, Raffael Künzi and Rudolf M. Fuchsli	Detection and Classification of Risks from Radar Data
17:15-17:45	WIVACE MEETING	
18:00: 23.00	SOCIAL EVENT AND SOCIAL DINNER	

Friday 8, SEPTEMBER

9:00-10:00	KEYNOTE SPEECH: Wolfgang Banzhaf	
10:00-10:50	M5 Morning session 5	
(25 min)	Fabiola De Marco, Luigi Di Biasi, Alessia Auriemma Citarella and Genoveffa Tortora	Improving PVC Detection in ECG Signals: A Recurrent Neural Network Approach
(25 min)	Johannes Schneider, Alessia Faggian, Mathias Weyland, William David Jamieson, Jin Li, Hans-Georg Matuttis, Silvia Holler, Federica Casiraghi, Aitor Patino Diaz, Lorena Cebolla Sanahuja, Martin Hanczyc, Dandolo Flumini, Peter Eggenberger Hotz, David Barrow, Pantelitsa Dimitriou, Oliver Castell and Rudolf M. Fuchslin	Percolation Breakdown in Binary and Ternary Monodisperse and Polydisperse Systems of Spherical Particles
10:50-11:20	Coffee break	
11:20-13:00	M6 Morning session 6	
(25 min)	Giada Fini, Gianluca D'Addese, Luca La Rocca and Marco Villani	On the detection of significant pairwise interactions in complex systems
(25 min)	Gonzalo Mendez and Pablo Gervás	Evolutionary Story Sifting over the Log of a Social Simulation
(25 min)	Paolo Pellizzari	Learning whether to be informed in an agent-based evolutionary market model
(25 min)	Elpida Tzafestas	Evolution of Attraction for Cooperation
13:00-14:00	Lunch	
14:00-15:00	A5 Afternoon Session 5	
(20 min)	Michiel Stock and Thomas Goroehowski	How to make everything: open-endedness in synthetic biology
(20 min)	Simone Righi, Shirsendu Podder and Francesca Pancotto	Reputation, punishment and strategy complexity stabilize cooperation in the Optional Public Goods Game
(20 min)	Andrea Roli	The Hiatus Between Organism and Machine Evolution
15:00-16:00	KEYNOTE SPEECH: Michele Vendruscolo	
16:00-16:10	Closing session	