

| Giorno        | Speaker                    | Titolo  |
|---------------|----------------------------|---|
|               |                            |   |
| <b>09-lug</b> |                            |   |
|               | Piilo Jyrki                | <i>Large scale statistically validated comorbidity networks</i>   |
|               | De Domenico Manlio         | <i>Integrated modelling and analysis of biomedical systems</i>  |
|               | Howard Martin              | <i>Modelling dynamical DNA methylation patterns</i>   |
|               | Biondo Marta               | <i>The intrinsic dimension of gene expression during cell differentiation</i>   |
|               | Buonfiglio Valentina       | <i>Mechano-kinetic characterisation of a small ensemble of myosin motors: a stochastic approach to actin-myosin interaction dynamics</i>      |
|               | Migliorini Giuliano        | <i>Diffusion and enzymatic reactions in solutions crowded by branched polymers</i>  |
|               | Freund Jan                 | <i>Desynchronization transition in a model for broadcast spawning</i>   |
| <b>10-lug</b> |                            |   |
|               | Stramaglia Sebastiano      | <i>Localizing synergies of hidden factors across complex systems: resting brain networks and HeLa gene expression profile as case studies</i> |
|               | Scialdone Antonio          | <i>Exploring spatial coding in olfaction with transcriptomics and machine learning</i>  |
|               | Casale Francesco Paolo     | <i>Genetic analysis of retinal foundation model embeddings links morphology to ocular disease risk</i>  |
|               | Di Santo Serena            | <i>Frequency-Dependent Covariance Analysis Reveals Critical Spatiotemporal Patterns of Synchronized Activity in the Human Brain</i>           |
|               | Catalano Alessandro        | <i>Statistical Validation of Links in Biological Networks</i>   |
|               | Kalosakas George           | <i>Stochasticity induced transitions in a bistable genetic circuit</i>  |
|               | Schmitt Francois           | <i>Turbulence and plankton: experimental studies on optimal turbulence intensity for planktonic organisms</i>                                 |
|               | Suweis Samir               | <i>Nested oscillations and avalanches of neural activity in the rat barrel cortex</i>   |
|               | Contreras Seba             | <i>Testing as an Active Intervention to Control Epidemics</i>   |
|               | Di Patti Francesca         | <i>Demographic Noise and Pattern Formation in living systems: Dynamics at the Edge of Order and Disorder</i>                                  |
|               | Krishna Shivani            | <i>Nesting architecture of social wasps: ordering and growth dynamics</i>   |
|               | Sarmiento Yonathan         | <i>Human perceptual decision making of nonequilibrium fluctuations</i>  |
|               | Semeraro Massimiliano      | <i>Cluster size determines morphology of transcription factories in human cells</i>   |
|               | Moretti Daniela            | <i>Twistable DNA-like polymer dynamics</i>  |
| <b>11-lug</b> |                            |   |
|               | Jensen Henrik Jeldtoft     | <i>Emergence in Co-Evolution Dynamics: The Tangled Nature Model - Network and Information Theory</i>  |
|               | Miguel M. Carmen           | <i>Cohesion and Confinement in Fish Schools: Uncovering Universal Dynamics in Intermediate-Sized Groups</i>                                   |
|               | Lazzari Paolo              | <i>Understanding Marine Ecosystems Through Complex Biogeochemical Models</i>  |
|               | Matteo Gallo               | <i>Inferring Differential Equations with an Explainable Neural Network</i>  |
|               | Cunico Ilaria              | <i>Impact of the Microbial Loop on the Stability of the Trophic Network</i>   |
|               | Soto Lopez Carlos Enmanuel | <i>Assimilation of Remote Sensing Reflectance using a three-stream irradiance model</i>   |
|               | Azaele Sandro              | <i>Why most species are very rare? The role of disorder and fluctuations in the coexistence of species.</i>                                   |
|               | Esposito Andrea            | <i>Modeling Genome Architecture with Polymer Physics and Machine Learning in Health and Disease</i>   |
|               | Fiasconaro Alessandro      | <i>G-quadruplex substructures revealed through molecular dynamics simulations and complex Markov network analysis</i>                         |
|               | Di Carluccio Ciro          | <i>An Information theory approach to study cellular chromosome organization</i>   |
|               | Di Pierno Florinda         | <i>Statistical Inference of Chromatin Architecture in Sleep-Deprived Neurons</i>  |
|               | Fontana Andrea             | <i>Physical principles of phase-separation action on DNA folding associated to aberrant gene activation</i>                                   |
|               | Bupu Annamaria             | <i>Alternative Stable States in Microbial Communities: A Data-Driven Approach</i>   |