18/10		19/10	20/10	21/10
Arrival		09:00 Savel'ev	09:00 Di Ventra	Departure
Day		09:50 Tetzlaff	09:50 Dimitrakis	Day
		10:20 Coffee	e Break	
		10:50 Mikhaylov	10:50 Erokhin	
	PMM Session	Filatov	11:20 Koveshnikov	
	PMM	11:50 Agudov	11:50 Panin	
		12:20 Demin	Battistoni 12:40	
		Ascoli 13:00	Korolev	
14:00			ınch	
14.00		15:00 Pershin	Shchanikov 15:20	
		15:50 Brivio	Gismatulin 15:40 Guseinov 16:00	
Registration		16:20 Coffee Break		
		16:50 Sanz	16:50 Filatrella 17:10	
		Tselikov	Guarcello 17:30 Carollo 17:50	
18:00		Poster Session Oral	Leonforte 18:10	
Informal get-together at San Rocco's Cloister		Poster Session Discussion	Ben Khalifa  18:30  Round Table  Project Multistability  and Memristor  (PMM)  19:30	
20:00		20:00	Closing Remarks Free Discussion	
Dinner		<b>Social Dinner</b>	Dinner	
22:00		Almonds Sweets and at Marsala room	Marsala	

## Saturday 19/10

	Speaker	Talk
09:00 - 09:50	Savel'ev	Comparing biological and artificial memristive neurons
09:50 - 10:20	Tetzlaff	Real-time computing by Memristor Cellular Nonlinear Networks (M-CNN)
10:20 - 10:50		Coffee Break
10:50 - 11:20	Mikhaylov	Towards implementation of collective dynamics of stochastic memristor-coupled artificial neurons
11:20 - 11:50	Filatov	Noise-induced resistive switching studied by Conductive Atomic Force Microscopy
11:50 - 12:20	Agudov	Nonequilibrium distributions and relaxation times in a stochastic model of memristor
12:20 - 12:40	Demin	From formal neural networks to memristor-based spiking neuromorphic systems: perspectives and open issues
12:40 - 13:00	Ascoli	A novel system-theoretic technique to analyze and design mem-computing M-CNNs
13:00 – 15:00		Lunch
15:00 – 15:50	Pershin	Dynamical aspects of resistance switching: Attractors, bifurcations, and ideal behavior
15:50 – 16:20	Brivio	Noise and Variability in Oxide-based Filamentary Resistance Switching Devices
16:20 – 16:50		Coffee Break
16:50 – 17:20	Sanz	Quantum Memristors and Quantum Neurons
17:20 - 17:50	Tselikov	Synthesis of metal oxide-based hybrid nanomaterials and their prospective in neuromorphic applications
17:50 – 18:30		Poster Session - Oral
18:30 - 20:00		Poster Session - Discussion

## **Sunday 20/10**

	Speaker	Talk
09:00 - 09:50	Di Ventra	Memcomputing: leveraging memory and physics to compute efficiently
09:50 - 10:20	Dimitrakis	Emerging ReRAM devices and lithography manufacturing issues
10:20 - 10:50		Coffee Break
10:50 - 11:20	Erokhin	Organic Memristive Devices for Neuromorphic Applications
11:20 - 11:50	Koveshnikov	Resistive multi-level NVM devices for high capacity storage and neuromorphic system applications
11:50 - 12:20	Panin	Optoelectronic dynamic memristor systems based on two-dimensional crystals
12:20 - 12:40	Battistoni	Organic Memristive Devices and Organic Electrochemical Transistors: close friends in neuromorphic computations
12:40 – 13:00	Korolev	Formation of the new elements for the nonvolatile optical memory based on waveguides with switchable transparency of PCM materials
13:00 - 15:00		Lunch
15:00 - 15:20	Shchanikov	Memristor-based components for a bidirectional adaptive neural interface coupled with neuronal biocultures
15:20 - 15:40	Gismatulin	Charge transport mechanism of forming less SiO <sub>1.09</sub> -based memristor in various states
15:40 - 16:00	Guseinov	Atomistic and dynamical stochastic models of metal-oxide memristive devices
16:00 - 16:20	Petrenyov	Conduction Mechanisms in Zr/ZrO₂-NT/Au Memristor Structures before and after Electroforming
16:20 - 16:50		Coffee Break
16:50 - 17:10	Filatrella	Josephson junctions switching current analysis for signal detection
17:10 - 17:30	Guarcello	Thermal noise effects on a memory element based on an anomalous Josephson junction
17:30 - 17:50	Carollo	Equilibrium and non-equilibrium phase transitions: a measure of quantumness
17:50 - 18:10	Leonforte	Finite-temperature topological phase transitions in two-dimensional systems
18:10 – 18:30	Ben Khalifa	Screening of the synthesis route on the structural, magnetic and magnetocaloric properties of $La_{0.6}Ca_{0.2}Ba_{0.2}Mn_{0.3}$ manganite: comparison between solid-solid state process and combination polyol process and Spark Plasma Sintering
18:30 - 20:00		Round Table – Project Multistability and Memristor (PMM)
		Closing Remarks and Free Discussion

## **Poster Session**

Posters will be exposed in Saturday from 09:00 to 20:00 in the hall.

Poster discussion will be held in Saturday from 18:30 to 20:00.

Poster discussion will be preceded by a brief oral presentation session, 3 slides in 3 minutes, in which each participant will briefly show the focus and main results of the poster, inviting listeners to view it.

Boutasta	Structural, electronic and optical propreties of Perovskite BiFeO₃ Nanoparticles
Dubkov	Stationary probabilistic characteristics of memristor in circuit with capacitor and colored Gaussian voltage source
Gismatulin	Charge transport mechanism of SiN <sub>x</sub> -based memristor in various states
Gorshkov	Flicker noise spectroscopy as a tool for the measurement of activation energies of oxygen ion diffusion in memristor systems at fixed
	temperature
Kharcheva	Multistability in nonlinear dynamical systems induced by influence of colored noises
Koriazhkina	Statistical analysis of ZrO₂(Y)/Ta₂O₅-based memristor response to white Gaussian noise
Korolev	Effect of irradiation with Si+ ions on resistive switching in memristive structures based on yttria-stabilized zirconia and silicon dioxide
Krichigin	Memristive switching dynamics for symmetric three-stable profile based on the linear response theory
Orlov	Research of features bipolar resistive switching characteristics in Si₃N₄ based structure
Rubtsov	UNN interdisciplinary laboratory of stochastic multistable systems
Shchanikov	On the fault-tolerant tuning of multilayer perceptron networks based on memristor
Si Abdelkader	A Computational Study of Al/La <sub>1-x</sub> Sr <sub>x</sub> FeO <sub>3</sub> interface for Resistance Random Access Memory Applications
Smirnov	Investigation of forming-free TiO₂ memristor structures formed by local anodic oxidation nanolithography
Vokhmintsev	Unipolar and bipolar resistive switching in nanotubular titanium and zirconium oxide layers