

Second Training School on

“Memristors - Devices, Models, Circuits, Systems and Applications”

A three-day intensive training school coupled with networking opportunities

Dates: 7-9 May, 2016

Venue: Hotel dei Pini, Alghero, Italy

The recently rediscovered *memristors* have been shown to possess unique and intriguing properties, such as small size, high density, nonvolatility, and state-dependent behavior of current-voltage profiles. They are a novel class of devices that promises to revolutionize the electronics industry, and has high potential for implementing novel types of brain-inspired computing architectures.

In this training school we will provide introductory material to describe the basic properties of memristive devices, and present state-of-the-art results in modeling, fabricating and using such devices in system applications. We will cover a wide range of aspects concerning the development and use of memristors, ranging from device physics, equivalent circuit models, characterisation techniques, applications in learning and neural network architectures.

The training school will offer opportunities to meet some of the world-leading experts in the field and to form a multi-disciplinary network of researchers geared toward the development of memristor-based information processing systems.

The training school will start on Saturday May 7th and finish on Monday May 9th, 2016. It will take place in a spectacular location on the Mediterranean sea, close to the town of Alghero, Italy. The event will immediately follow the 2016 CapoCaccia Cognitive Neuromorphic Engineering Workshop (<http://capocaccia.iniforum.ch>)

The training school is open to all. It has **no registration fee**, as it is a service provided to the community, sponsored by the COST action and its members. The organizers have negotiated a special price with the Hotel, for the registered participants. The price of 120 EUR/day, for the basic room type, is for full-board accommodation and includes breakfast+lunch+dinner.

Financial support for travel and accommodation is available to participating COST country members. Due to budget constraints it will be limited to the most competitive applications. Application forms and instructions can be found at <http://www.memocis.eu>, under the Training School tab.

The training school logistics have been organized by IniForum (<http://iniforum.ch/>). After the acceptance notification, in order to take advantage of the special rates that have been negotiated with the Hotel, all trainees and trainers must register through: <http://www.iniforum.ch/events/ccmem2016/registration> . Travel reimbursement will be carried out in accordance to the COST rules after the event.

Important dates:

- Application deadline for the training school: **Deadline March 24th**
- Notification of acceptance: March 29
- Registration and Payment for Special Hotel Rate Deadline: **March 31st** (by 12 noon)

Training Instructors:

- Daniele Ielmini, “Theory and modeling of switching behavior in memristive devices”
- Sabina Spiga, “Memristive devices: technology and characterization”
- Ronald Tetzlaff, “Circuit theoretic aspects and applications of memristive devices”
- Elisabetta Chicca, “Neuromorphic Electronic Circuits for Learning with Memristive Devices”
- Giacomo Indiveri, “Neuromorphic Circuits and Systems for Memristive Architectures”
- Bernabe Linares Barranco, “Large-Scale Neuromorphic Memristive Architectures”

