The main aim of the XIII IEEE Topics on Microelectronics Summer School is improving the knowledge of the participants in the field of the Microelectronics design, facing different topics and from different perspectives as the microelectronics world is. This Summer School is then addressed to students (Master and PhD), researchers and industrial designers. The Summer School is composed by two Sessions per year. Each session consists of five long talks/lectures (3.5 h each, a sufficient time to give both overview and advanced details about the topic) given by academic professors or qualified experts coming from companies or research centers. In this way the academic and industrial approaches for research and state-of-the art progress will be presented.

Different topics will be addressed in each course. This offers a wide-spectrum for the audience about the present challenges in the microelectronics world. The Summer School is co-organized with the Cultural Association ‘InnoTech Events’; and it is supported by the IEEE Solid Circuits Society Italian Chapter.

**PROGRAM COORDINATOR AND DIRECTOR**
Prof. Andrea Baschirotto – University of Milan-Bicocca (Italy)

**PROGRAM SECRETARIAT**
Prof. Piero Malcovati – University of Pavia (Italy)
#ToM2019

## TECHNICAL PROGRAM

**Session 1 - May, 14-16, 2019**

**14 May 2019**

14:00  **DANIO MANSTRETTA**  (Univ. Pavia – Italy)  “LNA DESIGN: BASICS AND ADVANCES”

15 May 2019

09:00  **ANGELO RIVETTI, MANUEL ROLO**, (INFN Turin – Italy), “HIGH SPEED DIGITAL CIRCUITS AND INTERFACES”

14:00  **CORRADO VILLA, PAOLO FANTINI**  (MiKron, Italy), “STATE OF ART OF MEMORY TECHNOLOGIES: DESIGN AND TECHNOLOGY ASPECTS”

16 May 2019

09:00  **GABRIELE MINOIA**  (STM – Italy) “BJT CIRCUITS AND TECHNOLOGIES FOR OPTICAL COMMUNICATIONS”

14:00  **FILIPPO MAGRINI**  (Infineon, Germany) “FUNDAMENTALS OF ESD WITH FOCUS ON AUTOMOTIVE APPLICATIONS”

**Session 2 - September, 10-12, 2019**

10 September 2019

14:00  **ANTONIO LISCIDINI**  (Univ. Toronto – Canada) “PASSIVE SWITCHED CAPACITOR FILTERS (MODELLING AND DESIGN)”

11 September 2019

09:00  **ANTONIO LISCIDINI**  (Univ. Toronto – Canada) “INSIGHT INTO FILTERING ANALOG TO DIGITAL CONVERTERS”

14:00  **BRUNO MURARI**  (STMicroelectronics – Italy) “FROM THE SAND TO THE CLOUD”

12 September 2019

09:00  **MAURIZIO PAGANI**  (Huawei – Italy) “TRENDS, CHALLENGES AND INDUSTRY SOLUTIONS FOR MICROWAVE AND MM-WAVE INTEGRATED CIRCUITS”

14:00  **PIERO MALCOVATI**  (Univ. Pavia – Italy) “ADVANCES IN SILICON MICROPHONE INTERFACES”

## PREREQUISITES

The Summer School is open to students as well as to policy makers working in the field of Microelectronics from industries or research centers.

## ACCOMMODATION

If you have been selected to the summer school program, in order to request a quote on accommodation in one of the facilities of Bicocca Campus you can send an email to booking.bicocca.fms.it@sodexo.com

## HOW TO ENROLL

Registrations to “ToM” Summer School are managed by the cultural association **INNOTECHEVENTS**. Please consult the website [www.innotechevents.com](http://www.innotechevents.com) to access the application procedure. Payment options include bank transfer and paypal.

## SCHOLARSHIPS

The University of Milano-Bicocca offers partial/full scholarship please consult the web-site for update information and criteria of eligibility.

## IN COOPERATION WITH

The Summer School is organized in collaboration with the Italian Chapter of IEEE Solid State Circuit Society.