

**SIE 2019**  
**Rome, June 24 - 26**

**PhD School of the**  
**Società Italiana di Elettronica**

### **Electronics around the Earth**

The Ph.D. School of the SIE (“Società Italiana di Elettronica” – “Italian Electronics Society”) is an important event linked to the SIE Annual Meeting, which is announced for the 51th year.

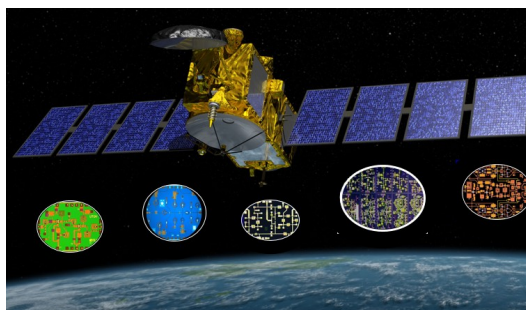
This year the School, entitled “Electronics around the Earth”, will focus on devices, sensors, circuits and systems for space applications with a cross-cultural approach in order to stimulate interactions among different research fields.

The aim is to discuss the basic concepts required to develop innovative and advanced systems, accounting for the harsh environment and constraints mandatory for successful space system development. The latter, from an engineering point of view, involves components and systems for sensing, transmission and reception of signals at high frequency, as well as high computing capabilities for signal processing.

Due to the broad but peculiar topic of the school, the lectures are organized starting from basic concepts of high frequency electronics, linked with several practical examples presented by industrial actors. Ph.D. students will have the unique opportunity to follow lectures given by the most relevant European experts, and to interact with them in the Q&A sessions after each talk.

At the end of each day, the students will undergo multiple-choice evaluation tests for the acquisition of credits.

Given the cross-cutting relevance of the topic, the School is expected to be of great interest for Ph.D. students dealing with any areas of electronics, i.e., analog H/L frequency, digital, sensors, telecom, etc.



**TOR VERGATA**



UNIVERSITÀ  
DEGLI STUDI  
DI ROMA

The SIE2019 Ph.D. School  
is hosted at “Centro Congressi”  
University of Rome “Tor Vergata”  
Via del Politecnico, 1

### **Contacts**

sie2019.roma@gmail.com

info@sie-2019.uniroma2.it

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*Ph.D. students and recent graduates are warmly  
invited to participate to this unique experience.*

*Young researchers, doctors, and company's R&D  
staff can also participate*



June 24th (Monday)		June 25th (Tuesday)		June 26th (Wednesday)	
08:45-09:00	<b>Welcome</b> <i>Prof. Paolo Colantonio</i>				
09:00-09:50	<b>Electronics Around the Earth</b> <i>Prof. Franco Giannini</i>	09:00-09:50	<b>Digital Architectures for Space</b> <i>Prof. Gian Carlo Cardarilli</i>		
09:50-10:00	<b>Questions and Answers</b>	09:50-10:00	<b>Questions and Answers</b>	9.45-10:50	<b>Test</b> <b>CFU certification</b>
10:00-10:50	<b>The New Space Economy, evolution of space infrastr. in the information age</b> <i>Dr. Massimo Claudio Comparini</i>	10:00-10:50	<b>Data Converters and Space Applications</b> <i>Prof. Marco Re</i>		
10:50-11:00	<b>Questions and Answers</b>	10:50-11:00	<b>Questions and Answers</b>	10:50-11:00	<b>Questions and Answers</b>
11:00-11:20	<b>COFFEE BREAK</b>	11:00-11:20	<b>COFFEE BREAK</b>	11:00-11:20	<b>COFFEE BREAK</b>
11:20-12:50	<b>High Frequency Electronics for space systems</b> <i>Prof. Ernesto Limiti</i>	11:20-12:50	<b>Spaceborne Active Antennas</b> <i>Dr. Piero Angeletti</i>	11:20-12:00	<b>Payload Space Qualification Process</b> <i>Dr. Raimondo Fortezza</i>
12:50-13:00	<b>Questions and Answers</b>	12:50-13:00	<b>Questions and Answers</b>		
13:00-14:00	<b>LUNCH</b>	13:00-14:00	<b>LUNCH</b>	<b>PHD SCHOOL TEACHERS</b> <i>Prof. Franco Giannini, Prof. Ernesto Limiti, Prof. Gian Carlo Cardarilli, Prof. Marco Re from Università degli Studi di Roma Tor Vergata, Italy.</i> <i>Dr. Massimo Claudio Comparini from A.D. e-GEOS, Italy.</i> <i>Dr. Toni Catalano, Dr. Lorenzo Simone, from Thales Alenia Space, Italy.</i> <i>Dr. Filiberto Bilotti from Università degli Studi Roma 3, Italy.</i> <i>Dr. Elena Abdo Sánchez, Prof. Teresa M. Guerrero from Universidad de Malaga, Spain.</i> <i>Dr. Piero Angeletti, Dr. Gianluca Furano from ESA, The Netherland.</i> <i>Prof. Angel Mediavilla from Universidad de Cantabria Spain.</i> <i>Dr. Francesco Rogo from Leonardo, Italy.</i> <i>Dr. Raimondo Fortezza from Telespazio, Italy.</i>  <b>PHD SCHOOL CHAIRS</b> <i>Prof. Paolo Colantonio, Prof. Franco Giannini, Prof. Eugenio Martinelli, Prof. Marco Re.</i>	
14:00-14:50	<b>High Performance Embedded Computing in Space</b> <i>Dr. Gianluca Furano</i>	14:00-14:50	<b>Waveguide Subsystems for Antenna Feed</b> <i>Prof. Angel Mediavilla</i>		
14:50-15:00	<b>Questions and Answers</b>	14:50-15:00	<b>Questions and Answers</b>		
15:00-15:50	<b>Microwave antennas for space applications</b> <i>Prof. Filiberto Bilotti</i>	15:00-15:50	<b>Power Supply Systems</b> <i>Dr. Toni Catalano</i>		
15:50-16:00	<b>Questions and Answers</b>	15:50-16:00	<b>Questions and Answers</b>		
16:00-16:20	<b>COFFEE BREAK</b>	16:00-16:20	<b>COFFEE BREAK</b>		
16:20-17:10	<b>Metasurfaces to Build Leaky-Wave Antennas With Radiation Flexibility</b> <i>Dr. Elena Abdo Sánchez</i>	16:20-17:10	<b>Intellectual Property</b> <i>Dr. Francesco Rogo</i>		
17:10-17:20	<b>Questions and Answers</b>	17:10-17:20	<b>Questions and Answers</b>		
17:20-18:10	<b>Galileo. The European Global Navigation Satellite System</b> <i>Prof. Teresa M. Guerrero</i>	17:20-18:10			
18:10-18:20	<b>Questions and Answers</b>	18:10-18:20			

