

### Monday September 23, 2019 – Tutorials, Workshop

Time / Room	Main Auditorium A	Main Auditorium B	Small Aula	Exhibition Room	Medium Aula A	Medium Aula B	Seminar Room
Legend	Tutorials						Workshop
Registration	08:00 – 08:30						
Morning Session I	Basics of Jitter and Phase Noise (08:30 – 10:00)	5G Radios: Concepts, Systems, and Silicon (08:30 – 10:00)	Circuits and Systems Enabling Quantum Technologies (08:30 – 10:00)	Nanoscale Technology, Transistor Modeling & IC Design (08:30 – 10:00)	Low-power RF and Analog Circuits (08:30 – 10:00)	Technologies and Devices for IoT (08:30 – 10:00)	Heterogeneous Integration of Nanomaterials and Innovative Devices (08:30 – 10:00)
Coffee	10:00 – 10:30						
Morning Session II	Basics of Jitter and Phase Noise (10:30 – 12:00)	5G Radios: Concepts, Systems, and Silicon (10:30 – 12:30)	Circuits and Systems Enabling Quantum Technologies (10:30 – 13:00)	Nanoscale Technology, Transistor Modeling & IC Design (10:30 – 12:00)	Low-power RF and Analog Circuits (10:30 – 13:00)	Technologies and Devices for IoT (10:30 – 12:45)	Heterogeneous Integration of Nanomaterials and Innovative Devices (10:30 – 12:45)
Lunch	12:30 – 14:00	12:30 – 13:45	13:00 – 14:00	12:30 – 14:00	13:00 – 14:00	13:00 – 14:00	13:00 – 14:00
Afternoon Session I	Basics of Jitter and Phase Noise (14:00 – 15:30)	5G Radios: Concepts, Systems, and Silicon (13:45 – 15:45)	Circuits and Systems Enabling Quantum Technologies (14:30 – 15:20)	Nanoscale Technology, Transistor Modeling & IC Design (14:00 – 15:30)	Low-power RF and Analog Circuits (14:15 – 15:30)	THz Science, Technologies and Applications (14:00 – 15:30)	Heterogeneous Integration of Nanomaterials and Innovative Devices (14:00-15:15)
Coffee	15:30 – 16:00	15:45 – 16:15	15:30 – 16:00	15:30 – 16:00	15:30 – 16:00	15:30 – 16:00	(15:30 – 16:00)
Afternoon Session II	Basics of Jitter and Phase Noise (16:00 – 17:30)	5G Radios: Concepts, Systems, and Silicon (16:15 – 18:00)	Circuits and Systems Enabling Quantum Technologies (16:00 – 18:30)	Nanoscale Technology, Transistor Modeling & IC Design (16:00 – 17:00)	Low-power RF and Analog Circuits (16:00 – 18:30)	THz Science, Technologies and Applications (16:00 – 18:15)	Heterogeneous Integration of Nanomaterials and Innovative Devices (16:00 – 18:15)
18:30 – 20:00	Young Professionals and Students Micro-Mentoring and Career Coaching Session (Exhibition Room)						

## Tuesday September 24, 2019

Time / Room	Main Auditorium A	Main Auditorium B	Small Aula	Conference Room	Medium Aula A	Medium Aula B	Seminar Room	
08:00 – 08:30	<b>Registration</b>							
08:30 – 09:00	<b>Auditorium A and B: Conference Opening and Welcome</b>							
09:00 – 09:40	<b>Auditorium A and B: Joint Plenary 1: Edoardo Charbon, EPFL, Cryo-CMOS: 60 Years of Technological Advances towards Emerging Quantum Technologies</b>							
09:40 – 10:20	<b>Auditorium A and B: Joint Plenary 2: Franck Arnaud, STMicroelectronics, 28nm FDSOI Platform with Embedded PCM for IoT, ULP, Digital, Analog, Automotive and Others Applications</b>							
10:20 – 11:00	<b>Coffee Break</b>							
11:00 – 12:20	Analog Techniques	High Performance Oscillators	Hardware Security Circuits	Biomedical Interfaces	Focus Session I: Challenges for Power Devices & Merging Microelectronics with Optics		WBG and Si Devices for Power and RF	
12:20 – 14:00	<b>Lunch</b>							
14:00 – 15:20	Imaging and Radiation	PLLs	Digital Interface and Compensation Circuits	Energy Harvesting	Focus Session II: MEMS, Sensors & Advanced Integration Technologies		Compact Modeling Under Cryogenic Conditions	
15:20 – 15:50	<b>Coffee Break</b>							
15:50 – 16:30	ESSCIRC Keynote 1: Ram K. Krishnamurthy, Intel	ESSDERC Keynote 1: Michael Heuken, AIXTRON SE						
16:40 – 18:00	Analog Systems	Temperature Sensors	TX Techniques		Focus Session III: Advanced Semiconductor Process & Device Technologies in Europe		FET Devices for Sensing Applications	
18:00 – 19:00	ESSCIRC TPC Mtg.	ESSDERC TPC Mtg.						
19:00 – 21:00	<b>Welcome Cocktail: AGH Main Building – A0 (av. Mickiewicza 30)</b>							

**SSCS Diversity Luncheon: Cultivating Engineering Confidence: Tuesday, September 24, 12:40 – 14:00, Bistro Room**

<b>Wednesday September 25, 2019</b>							
<b>Time / Room</b>	<b>Main Auditorium A</b>	<b>Main Auditorium B</b>	<b>Small Aula</b>	<b>Conference Room</b>	<b>Medium Aula A</b>	<b>Medium Aula B</b>	<b>Seminar Room</b>
<b>08:30 – 08:45</b>	<b>Auditorium A and B: Presentation on ESSCIRC/ESSDERC 2020</b>						
<b>08:45 – 09:00</b>	<b>Auditorium A and B: Awards Ceremony</b>						
<b>09:00 – 09:40</b>	<b>Auditorium A and B: Joint Plenary 3: Toshio Yanagida, Osaka University, Single Molecule Nano-Science: Noise and Function of Life</b>						
<b>09:40 – 10:20</b>	<b>Coffee Break</b>						
<b>10:20 – 12:00</b>	<b>High Resolution SAR ADC</b>	<b>Wireless RX</b>	<b>MM-Wave Frequency Multipliers</b>	<b>Machine Learning and Accelerators</b>	<b>Advanced and Emerging Memories</b>	<b>Non-Conventional Devices</b>	<b>Modeling of Compound Semiconductor Devices</b>
<b>12:00 – 13:30</b>	<b>Lunch</b>						
<b>13:30 – 14:10</b>	<b>ESSCIRC Keynote 2: Jeff Walling, Tyndall National Institute</b>	<b>ESSDERC Keynote 2: Subhasish Mitra, Stanford University</b>					
<b>14:20 – 15:40</b>	<b>Amplifiers and Filters</b>	<b>Wireline</b>	<b>Power Management</b>	<b>SSCS Chapter Chairs Meeting</b>	<b>Analog/RF</b>	<b>Hardware for Neuromorphic Computing</b>	<b>Advances in MOSFET Modeling</b>
<b>15:40 – 16:00</b>	<b>Coffee Break</b>						
<b>16:00 – 16:10</b>	<b>Bus Departure to Wieliczka Salt Mine – Gala Dinner</b>						

**Thursday September 26, 2019**

Time / Room	Main Auditorium A	Main Auditorium B	Small Aula	Conference Room	Medium Aula A	Medium Aula B	Seminar Room
09:00 – 09:40	<b>Auditorium A and B: Joint Plenary 4:</b> Donhee Ham, Harvard University, Copying Brain with Semiconductor Technology						
09:40 – 10:20	<b>Coffee Break</b>						
10:20 – 12:00	High-Speed ADC	Sensor Interfaces	Millimeter-wave Power Amplifiers	Memory-Centric Design	Modeling of Trap Effects and Noise	Photonic and Microwave Devices	Multi-physics Modeling
12:00 – 13:30	<b>Lunch</b>						
13:30 – 14:10	ESSCIRC Keynote 3: Pieter Harpe, TU Eindhoven	ESSDERC Keynote 3: Jong-Ho Lee, Seoul National University					
14:20 – 15:40	Sigma-Delta and Time-Based ADC	Wireless TX	RX and Imaging Techniques		Derivative Technologies	Optical and Thermal Sensors	Advanced Device Modeling