

PACET 2017 Overview Program

Friday, November 17 th		
Elisso Xenia Hotel (Registration)	08:15 – 08:45	Registration Opening
	08:45 – 09:00	PACET 2017 Opening – K. E. Zoiros, G. Ch. Sirakoulis
	09:00 – 10:00	Invited Talk: A. Ascoli Chair: G. Ch. Sirakoulis
	10:00 – 11:15	Electronics I / Electronic Systems and Technology Chair: G. Ch. Sirakoulis
	11:15 – 11:45	<i>Coffee Break / Poster Session I</i>
	11:45 – 13:15	Telecommunications I / Optics and Microwaves Chair: K. E. Zoiros
	13:15 – 14:45	<i>Lunch</i>
	14:45 – 15:15	IEEE CAS & SSC Joint Greek Chapter Presentation A. Hatzopoulos
	15:15 – 16:30	Electronics II / Memristors, Memory Devices and Systems Chair: S. Nikolaidis
	16:30 – 17:00	<i>Coffee Break / Poster Session I</i>
	17:00 – 18:30	Electronics III / Power Electronics Chair: N. Papanikolaou
	19:00 - 21:30	PACET 2017 Welcome Reception in Elisso Xenia Hotel
Saturday, November 18 th		
Elisso Xenia Hotel (Registration)	09:00 – 10:00	Invited Talk: J. N. Sahalos Chair: M. Chrissyomallis
	10:00 – 11:00	Telecommunications II / Optics and Microwaves Chair: G. Kyriakou
	11:00 – 11:30	<i>Coffee Break / Poster Session II</i>
	11:30 – 13:00	Electronics IV / Electronic Circuits Chair: S. Siskos
	13:00 – 14:30	<i>Lunch</i>
	14:30 – 15:30	Invited Talk: E. N. Gazis Chair: A. Hatzopoulos
	15:30 – 17:00	Electronics V / Various Electronics Applications Chair: Y. Tsiatouhas
	17:00 – 17:30	<i>Coffee Break / Poster Session II</i>
	17:30 – 18:30	Round Table: Future of Electronics and Telecommunications in Greece
	19:30 - 23:00	Social dinner in Xanthippi Restaurant, Xanthi

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Oral Presentations

Friday, November 17 th	
09.00	PACET 2017 Opening – K. E. Zoiros, G. Ch. Sirakoulis
09.10	Invited Talk – A. Ascoli Mem-adaptive computing by memristor circuits (Chair: G. Ch. Sirakoulis)
Electronics I / Electronics Systems and Technology (Chair: G. Ch. Sirakoulis)	
10.00	Fotis Kostarelos, George Charitopoulos and Dionisios Pnevmatikatos: <i>Less is More: Increasing the Scope of Hardware Debugging with Compression</i>
10.15	Ioannis Messaris, Maria Ntogramatzi, Nikolaos Karagiorgos and Spyridon Nikolaidis: <i>Evaluation of NLDM models for Nano-scale CMOS Digital Cells produced by an Equivalent Inverter-based Modeling Tool</i>
10.30	Nikolaos Georgouloupoulos and Alkiviadis Hatzopoulos: <i>Real Number Modeling of a Flash ADC Using SystemVerilog</i>
10.45	Panagiotis Vosniadis and Stylianos Siskos: <i>A new threshold-voltage compensation technique of IGZO and LTPS for AMOLED display pixel circuit</i>
11.00	Ioannis Gkionis, Martha Vakalopoulou-Paschalidou, Dimitrios-Panagiotis Argyropoulos, Filippos Farmakis, Costas Elmasides and Nikolaos Georgoulas: <i>Carbon Fiber Electrodes Enhanced with Graphene Oxide for Supercapacitors</i>
11.15	Coffee Break / Poster Session I
Telecommunications I / Optics and Microwaves (Chair: K. E. Zoiros)	
11.45	Athanasios Manolis, Dimitra Ketzaki, George Dabos, Dimitris Tsiokos and Nikos Pleros: <i>Bridging Si3N4 waveguide and gold (Au) based hybrid plasmonic slot waveguide</i>
12.00	Xenofon Mitsalass and George Kyriacou: <i>Leaky Wave Modes Excited on a Grounded Magnetized Plasma Slab Supporting Antenna Applications</i>
12.15	Constantinos Votis, Giorgos Tatsis, Vasilis Christofilakis, Panos Kostarakis, Vasilis Tritakis and Christos Repapis: <i>Analog front end of the Extremely low frequency station at Ioannina in Greece for the measurement of Schumann resonances</i>
12.30	Anastasios Koutinos, Georgios Ioannopoulos, Michael Chryssomallis and Georgios Kyriacou: <i>Quadruple-fed Supershape Patch Radiator with Enhanced Bandwidth Operation</i>
12.45	Denis Letavin and Sergey Shabunin: <i>Investigation of the construction of the phase shifter based on a 3-dB directional coupler</i>
13.00	Lunch
14.45 IEEE CAS and SSC Joint Greek Chapter Presentation – A. Hatzopoulos	
Electronics II / Memristors, Memory Devices and Systems (Chair: S. Nikolaidis)	
15.15	Dimitrios Prousalis, Christos Volos, Ioannis Stouboulos, Ioannis Kyprianidis and Dimitrios Frantzeskakis: <i>An Extended Study of Extreme Multistability in a Memristive Circuit</i>
15.30	Alon Ascoli, Vasileios Ntinias, Ronald Tetzlaff and Georgios Christos Sirakoulis: <i>Towards an analytical description of a TaO memristor</i>
15.45	Dimitrios Prousalis, Christos Volos, Ioannis Stouboulos, Ioannis Kyprianidis, Hector Nistazakis and George Tombras: <i>Chaotic Synchronization in Coupled Neuronal Circuits via a Memristor</i>
16.00	Anastasios Petropoulos and Theodore Antonakopoulos: <i>Hardware Emulation of Phase Change Memory</i>
16.15	Lazaros Spyridopoulos, Theodoros Simopoulos, Nikos Konofaos and George Alexiou: <i>Crossbar Sector Addressing Scheme on SRAMs</i>
16.30	Coffee Break / Poster Session I
Electronics III / Power Electronics (Chair: N. Papanikolaou)	
17.00	Dimitris Baros, Konstantinos Bampouras, Parthena Apostolidou, Evangelos Ioannou and Nick Papanikolaou: <i>Multilevel Inverters for Motor Drives and Wireless Power Transfer Applications</i>
17.15	Eleni Gati and Stefanos Manias: <i>Capacitive Output Filter Effect on Series-Series Inductive Power Transfer Systems Operating in Asymmetric Loading Mode</i>
17.30	Alexandros Boubaris, Emmanuel Karampasis, Dionisis Voglitsis and Nick Papanikolaou: <i>Experimental survey on active thermoelectric cooling driven by PWM techniques</i>
17.45	Nikolaos Milas, Emmanuel Tatakis and Epaminondas Mitronikas: <i>Investigation of the operation of an electric city car equipped with electronic differential using CAN-enabled monitoring</i>
18.00	Dionisis Voglitsis, Dimitris Baros, Nick Papanikolaou and Epaminondas Mitronikas: <i>Survey of the effects originating from the integration of a new regenerative braking system in electric lifts drives</i>
18:15	Marianthi Pefkianaki, Charoula Zogogianni and Emmanuel Tatakis: <i>Investigation of the Operational Behavior of a DC/DC High Step Up R2P2 Converter</i>
19:00	Welcome Reception

Saturday, November 18 th	
09.00	Invited Talk – J. N. Sahalos Battery-less RFID Tags: Efforts in Wireless Power Transmission (Chair: M. Chryssomallis)
Telecommunications II / Optics and Microwaves (Chair: G. Kyriacou)	
10.00	Evangelia Chatzianagnostou, George Dabos, Dimitra Ketzaki, Dimitris Tsiokos and Nikos Pleros : <i>Efficient coupling between thin-film plasmonic and SiN photonic waveguide</i>
10.20	Zoe Rizou and Kyriakos Zoiros : <i>Microring resonator design with application to performance improvement of optically or electrically modulated semiconductor optical amplifiers</i>
10.40	George Mourgias-Alexandris, Miltiadis Moralis-Pegios, Nikos Terzenidis, Konstantinos Vyrsokinos and Nikos Pleros : <i>Implementation of an All-Optical Buffer & Time-Slot-Interchanger based on Integrated SOI delay lines</i>
11.00	Amalia Saliakoura, Georgia Theodosiadou, Alexandros Rigas, George Kyriacou and Michalis Zervakis : <i>Single Equivalent Dipole Inverse Electrocardiography based on ordinary 12 leads recordings</i>
11.00	Coffee Break / Poster Session II
Electronics IV / Electronic Circuits (Chair: S. Siskos)	
11.30	Costas Vastarouchas and Costas Psychalinos : <i>Biomedical and Biological Applications of Fractional-Order Circuits</i>
11.45	Adam Raptakis, Costas Oustoglou and Paul Sotiriadis : <i>Laboratory Jitter Removal Circuit for Single-bit All-Digital Frequency Synthesis</i>
12.00	Panagiotis Bertias and Costas Psychalinos : <i>Capacitorless Fractional-Order Filters and Capacitor/Inductor Emulators</i>
12.15	Nikolaos Baxevanakis, Ioannis Georgakopoulos and Paul P. Sotiriadis : <i>Rail-to-Rail Operational Amplifier with Stabilized Frequency Response and Constant-gm Input Stage</i>
12.30	Nick Temenos, Charis Basetas and Paul Sotiriadis : <i>Efficient All-Digital Frequency Synthesizer Based on Multi-Step Look-Ahead Sigma-Delta Modulation</i>
12.45	Nick Temenos, Charis Basetas and Paul Sotiriadis : <i>Noise Shaping Advantages of Band-Pass Multi-Step Look-Ahead Sigma-Delta Modulators Over Conventional Ones in Signal Synthesis</i>
13.00	Lunch
14.30	Invited Talk – E. N. Gazis The Particle Physics research status after the Higgs boson discovery. CERN a strategic partner in the data revolution (Chair: A. Hatzopoulos)
Electronics V / Various Electronics Applications (Chair: Y. Tsiatouhas)	
15.30	Konstantinos Tzortzakis, Konstantinos Papafotis and Paul P. Sotiriadis : <i>Wireless Self Powered Environmental Monitoring System for Smart Cities based on LoRa</i>
15.45	Angelos Kyriakos, Ioannis Patronas, Georgios Tzimas, Vasileios Kitsakis and Dionysios Reisis : <i>Realizing Virtual Output Queues in High Throughput Data Center Nodes</i>
16.00	Anastasios Valkanis, Athanasios Iossifides and Periklis Chatzimisios : <i>An Interference Based Dynamic Channel Access Algorithm for Dense WLAN deployments</i>
16.15	Christos Dimas and Paul Sotiriadis : <i>Conductivity Distribution Measurement at Different Low Frequencies Using a Modular 64 Electrode Electrical Impedance Tomography System</i>
16.30	Nikolaos Toulgaridis, Eleni Bougioukou and Theodore Antonakopoulos: <i>RBM-based Hardware Accelerator for Handwritten Digits Recognition</i>
16.45	Ioannis Georgakopoulos, Neoklis Hadjigeorgiou and Paul P. Sotiriadis : <i>A CMOS Closed Loop AMR Sensor Architecture</i>
17.00	Coffee Break / Poster Session II
17.30	Round Table: Future of Electronics and Telecommunications in Greece
19:30	Social Dinner in Xanthippi Restaurant, Xanthi

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Poster Presentations

Friday, November 17 th	
11.15-11.45 & 16.30-17.00	Michail Ninos, Hector Nistazakis, George Tombras and Christos Volos : <i>SIMO PPM Optical Wireless Communication System over Gamma Turbulence Channels with Generalized Pointing Errors</i>
11.15-11.45 & 16.30-17.00	Konstantinos Prousalis and Nikos Konofaos: <i>Design and Implementation of Quantum Circuits for Fault-Tolerant Architectures</i>
11.15-11.45 & 16.30-17.00	Michael Loupis : <i>A toolset for the design of embedded systems, enabling HW/SW co-simulation, performance and source code generation</i>
11.15-11.45 & 16.30-17.00	George Isaakidis, Antonis Spiropoulos and Maria Drakaki : <i>A Wireless Built Three Dimensional Printer For Printed Circuit Board Applications</i>
11.15-11.45 & 16.30-17.00	Georgios Angelopoulos, Georgios Theodoros Kalampokis and Minas Dasygenis : <i>An Internet of Things Humanoid Robot Teleoperated by an Open Source Android Application</i>
11.15-11.45 & 16.30-17.00	Ourania Tacha, Ioannis Stouboulos, Efi Meletlidou and Ioannis Kyprianidis : <i>Electronic Circuit Emulation of a Novel Financial Chaotic System</i>
11.15-11.45 & 16.30-17.00	Kleanthis Xenitidis, Vassilios Mardiris and Vassilios Chatzis : <i>A Novel Methodology for Sailing Boat Waterline Plane Definition Using 3D Point Cloud (30)</i>

Saturday, November 18 th	
11.00-11.30 & 17.00-17.30	Spiridoula Menounou, Argyris Stassinakis, Hector E. Nistazakis, George Tombras and Harilaos Sandalidis : <i>Coverage Area Estimation for High Performance eSSK Visible Light Communication Systems</i>
11.00-11.30 & 17.00-17.30	Michail - Antisthenis Tsompanas and Georgios Ch. Sirakoulis : <i>The MapReduce application of Matrix Multiplication implemented on Field Programmable Gate Arrays</i>
11.00-11.30 & 17.00-17.30	Thomas Tsiolakis, Nikos Konofaos and Emmanouil Magdalis : <i>Design and Simulation of Hybrid CMOS – SET NAND Logical Gates</i>
11.00-11.30 & 17.00-17.30	Irene- Maria Tabakis, Minas Dasygenis and Magda Tsolaki : <i>A monitoring system for people living with Alzheimer's disease</i>
11.00-11.30 & 17.00-17.30	Angelos Giakoumis, Christos Volos, Ioannis Stouboulos and Ioannis Kyprianidis : <i>Development of a 32 Bit Microcontroller Embedded System for Studying Chaos in a Oscilloscope</i>
11.00-11.30 & 17.00-17.30	Stavroula Mammou, Dimitrios Balobas and Nikos Konofaos : <i>A VHDL implementation of the Hummingbird cryptographic algorithm</i>