MESSAGE FROM EUROCON.CONFTELE 2011 GENERAL AND TPC CHAIRMEN

GENERAL CHAIR EUROCON.CONFTELE 2011
João Costa Freire
Instituto de Telecomunicações/Instituto Superior Técnico
Portugal

TPC CHAIR EUROCON.CONFTELE 2011
José Carlos Pedro
Instituto de Telecomunicações/Universidade de Aveiro
Portugal

On behalf of the Organizing Committee, we would like to welcome all colleague participants at the EUROCON / ConfTele 2011 Lisbon, Portugal. Thanks to all authors (we have initially received over 450 papers with more than 1050 authors), to the 14 TPC Co-Chairs and the 317 reviewers, we have been able to organize a diversified but consistent technical program with a significant number papers on all main proposed topics. Since this year's edition of Eurocon is organized jointly with the Conftele, run in Portugal every other year by Instituto de Telecomunicações since 1997, the topics with more papers are those common to previous Conftele's: Telecommunication and Multimedia Systems (119 papers), Circuits and Systems (77 papers), and Information Technologies and Intelligent Systems (21 papers). These 3 Topics are concentrated on the first two days. The Topic of Power Systems and Renewable Resources, marginal in previous Conftele's editions, is usually a strong topic on Eurocon. This year is not an exception (50 papers). Almost a full day (last day) is devoted to this important topic for today's Electrical and Computer Engineers. Finally, the other two topics are horizontal topics, with interest for all EEC community: Education (26 papers) and Engineering Management (8 papers). Additional to these high technical/scientific papers we have two keynote speakers at the opening session presenting topics of general interest to all community: Innovation & Entrepreneurship (University/Industry Role); and International Cooperation on the Information Society and Media (e-Infrastructure - EU approach) Closing the 3 days event we have organized a Panel discussion on Renewable Energies and Smart Grids.

The IEEE Region 8 Student Paper Contest, organized by the IEEE Region 8 Committee, will be part of the program on the afternoon of the first day with the oral presentation of 5 selected papers. The winner will be announced at the Conference Banquet on Thursday April 28. A special social program was prepared, where the traditional Portuguese cuisine, with influences from East and West, and the Portuguese and world folk and classic music was not forgotten.

It was from Lisbon that in the XV century the Portuguese started the Discoveries Era to meet and exchange cultures and technology with other nations from all corners of the world namely Africa, western and eastern coast, Asia, from Gulf Area till Japan, and South America. Accordingly, in the XXI century, Lisbon constitutes a nice spot for experts in electro-technology and computers to share their experiences and know-how.

Having Lisbon and its surroundings as background - with a lot of monuments mainly from medieval (Romanesque and Gothic) till Baroque and modern periods and nice sceneries (small mountains and sea shore with nice sandy beaches and gorgeous cliffs - will help us make Eurocon 2011 a memorable meeting of highly skilled Electrical and Electronics Engineers.

All the organizing committee team and supporting institutions (IEEE Region 8 and Portugal Section, Instituto Superior Técnico and Instituto de Telecomunicações) hope all you enjoy the Conference.

> **WHO HAD NEVER IN LISBON BEEN HAD NEVER A NICER R8 SPOT SEEN**

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CONFERENCE INFORMATION

REGISTRATION DESK

Registration desk is located on Level 01, and is open daily from 08:30h to 17:30h, to distribute the Conference materials to all registered participants, and also for on-site registration. Printed receipts can be obtained on demand. Additional social program tickets may also be purchased there.

INTERNET ROOM

Participants can ask for credentials to use Conference's Wi-Fi access for his own laptop computer. All conference area is covered.

SPEAKER'S PREPARATION

Speaker's preparation room is located on level 02 at room 02.3 (please, consult the Congress Centre plant). Before each oral session, all presenters MUST upload and test their presentation files in a dedicated computer placed at the speaker's preparation room (room 02.3). Presentations should be compatible for reading in Adobe Acrobat Reader or MS PPoint. An authorized assistant will later upload these files to the correspondent session room laptop computer, as presenters cannot connect and use their personal computers for presentation. Make sure to use compatible software and check for the appropriate video co-decs, before starting your session.

POSTER SESSIONS

Poster boards are stand at the coffee break lobby, located in level 02. Poster boards are numbered. Look for the exact position of your poster in a list conveniently displayed for each session. Appropriate fixing items are available. Refrain from use your own fixing materials and specially do not use any type of tape. Make sure to display your poster soon enough before your session, and remove it just after the end of the session.

CONFERENCE LUNCHES

During conference days, complimentary buffet lunches, included in the registration fee, will be served to all participants. The lunches will be held at Level 00 of the Conference north side of the building (please, consult indicative signs). Please contact the Registration desk for special dietary requirements.

WELCOME RECEPTION

A Welcome Reception will be hosted by the Conference Board, on Wednesday, the 27th of April, at 19:00h. The Reception will take place at Level 00 lobby, near the Civil Engineering Museum area (please, consult indicative signs).

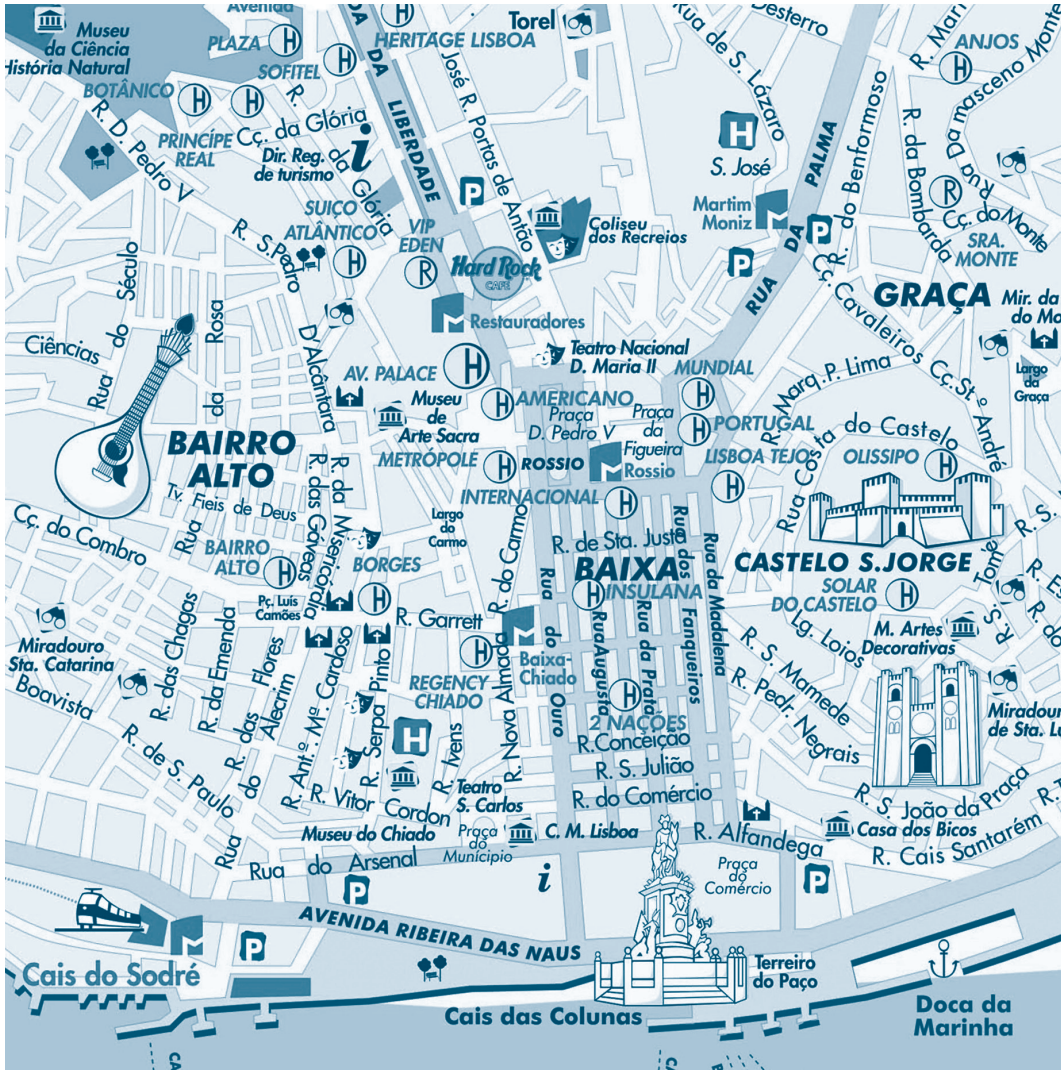
CONFERENCE BANQUET

The conference banquet will be held at "Quinta Pau da Bandeira" in a panoramic tent situated in the sanctuary of Cristo Rei (Almada) with breathtaking views over Lisbon and the Tagus River.

Buses will be provided to all the banquet participants, and will leave the IST Campus by 19h00. The banquet, a tasteful sample of Portuguese cuisine, will be preceded by a welcome drink outside the restaurant (if the weather conditions allow). After the banquet the Best Student Paper award ceremony will take place.

Banquet tickets (not included in the student/retired and accompanying person registrations) can be purchased (80 Euro) at the registration desk, subject to availability.

MAP OF DOWNTOWN LISBON



SUBWAY NETWORK MAP

Eurocon 2011 nearest subway stations

Saldanha, in the Yellow Line

Alameda, in the Green Line

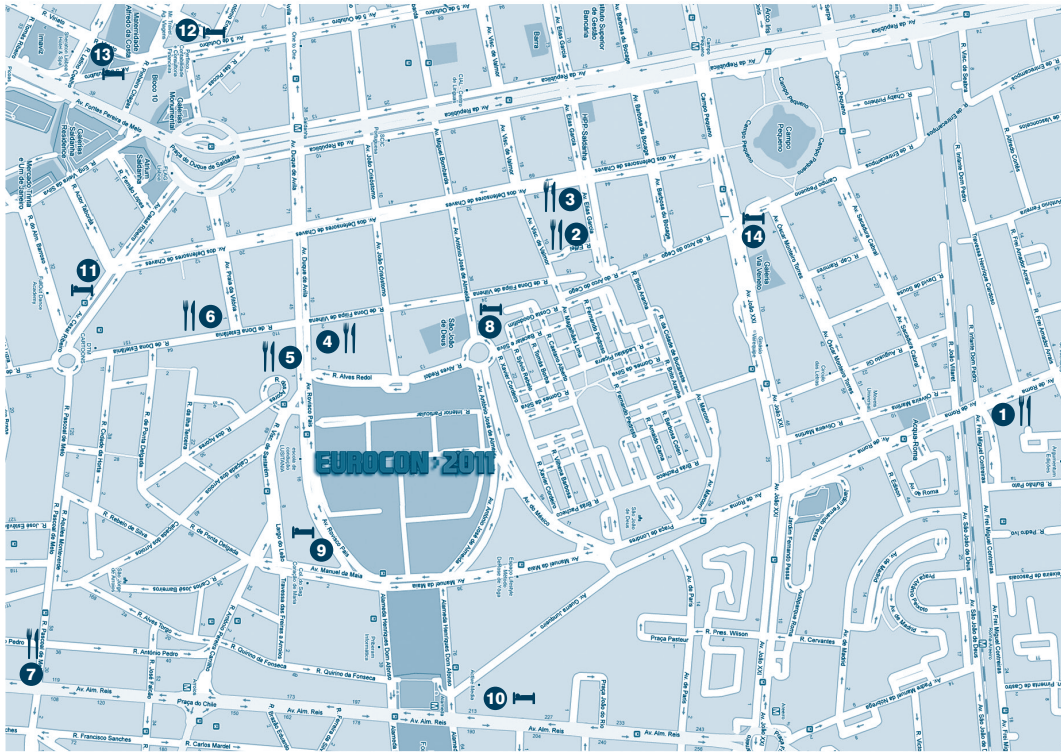
HOTEL AND DINNER ADRESSES

dinner restaurants

1 Dragão D'Ouro
2 Fogo de Chão
3 The Big Apple
4 Charrua do Lavrador
5 Costini
6 Osaka
7 Portugália

hotels

8 Holiday Inn
9 Turim Alameda
10 A.S. Lisboa
11 Ibis Lisboa Saldanha
12 Zeenit Lisboa
13 Sheraton Lisboa
14 Alif

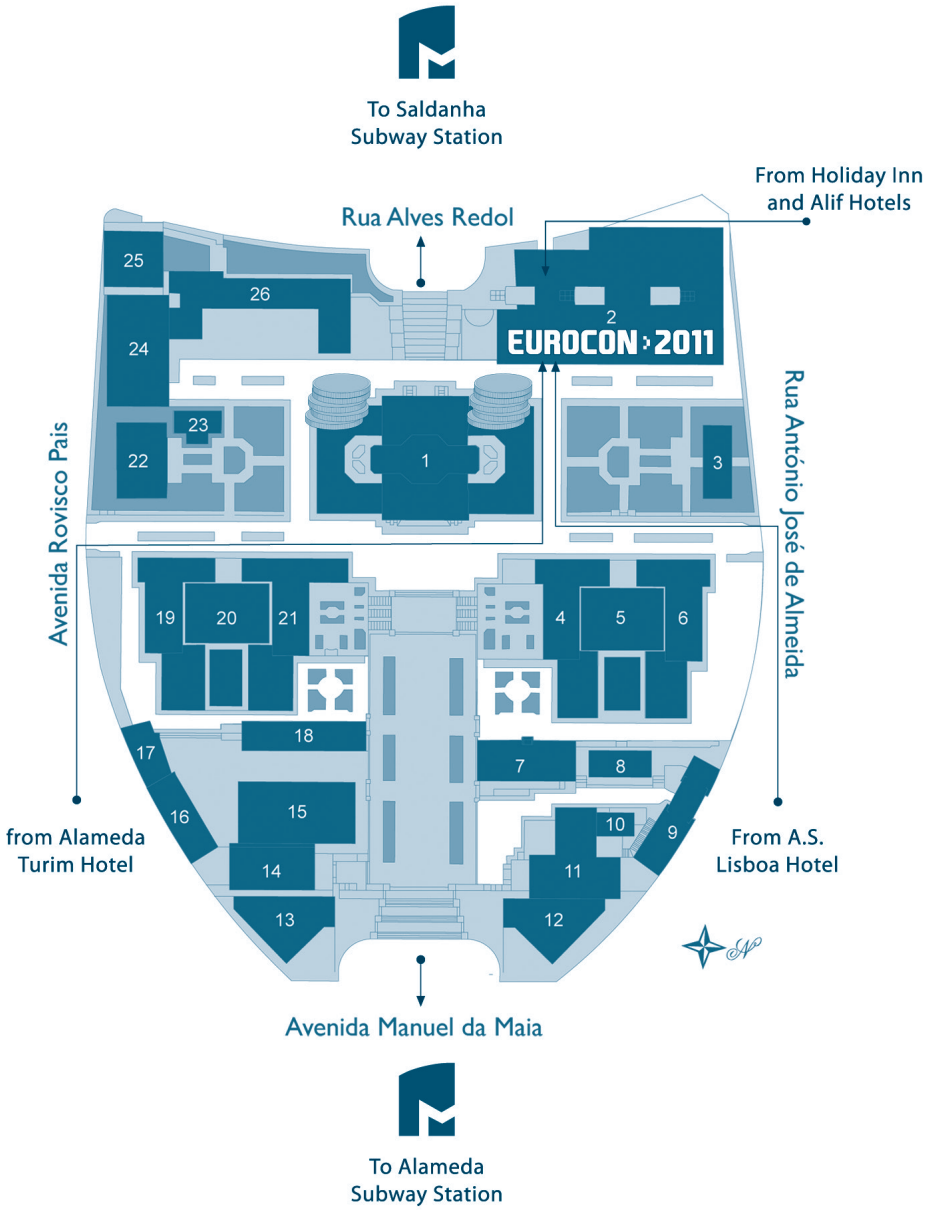


IST CAMPUS MAP

legend

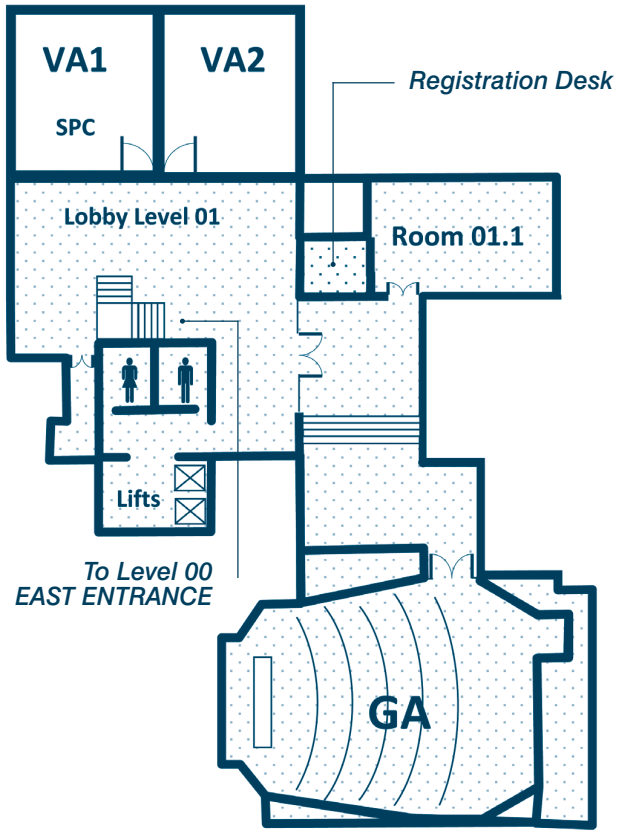
1. Main building
2. **Congress centre and civil engineering**
3. North garden pavilion
4. Mechanical engineering I
5. North tower
6. Electrical engineering
7. Informatics II
8. Mechanical engineering IV
9. Informatics I
10. Informatics III
11. Mechanical engineering II
12. Mechanical engineering III
13. Canteen
14. IST student association
15. Sports courts
16. Swimming pool
17. Social assistance
18. IST Press
19. Mining engineering
20. South tower
21. Chemical engineering
22. South garden pavilion
23. Kindergarten
24. Mathematics
25. Physics
26. Multidisciplinary building

Bank Agency

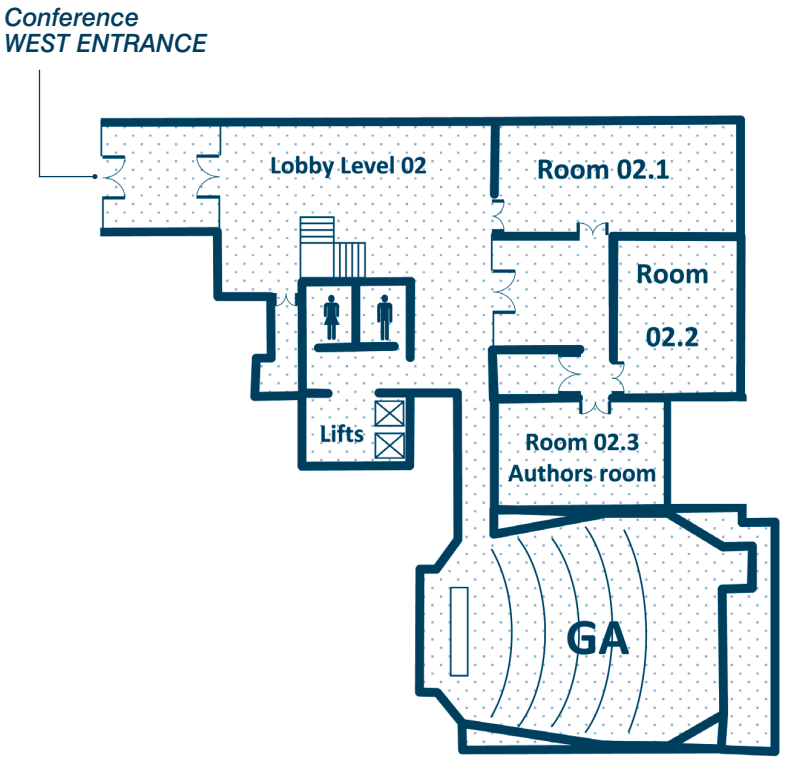


CONGRESS CENTRE LAYOUT

LEVEL 01



LEVEL 02



KEYNOTE SPEAKERS AND PANEL SESSION

KEYNOTE SPEAKERS PRESENTATION I

TBD

INNOVATION ENTREPRENEURSHIP UNIVERSITY INDUSTRY ROLE

Wednesday, April 27 › 10h00

KEYNOTE SPEAKERS PRESENTATION II

MARIO CAMPOLARGO

BOOSTING THE DIGITAL AGENDA FOR EUROPE
THE CONTRIBUTION OF FUTURE INTERNET

Wednesday, April 27 › 10h30

Mário Campolargo is the Director of the "Emerging Technologies and Infrastructures" Directorate of DG-INFSO in charge of Future and Emerging Technologies, ICT based infrastructures for science as well as ICT trust and security, experimental facilities and experimentally driven research for Future Internet.

Before joining the European Commission in 1990, he worked for 12 years in the R&D Center of Portugal Telecom as a researcher and manager.

Mário Campolargo has a Degree in Electrical Engineering by the University of Coimbra, a Master of Science in Computing Science by the Imperial College London, a Post graduate in Management by the Solvay Business School in Brussels and a European Studies Diploma by the Université Catholique de Louvain-la-Neuve in Belgium."

PANEL SESSION CHAIR

ANTÓNIO VIDIGAL

RENEWABLE ENERGIES AND SMART GRID

Friday, April 29 › 16h30

António Vidigal is the CEO at EDP Inovação (Electricidade de Portugal).

António Vidigal has a Degree in Electrical Engineering by Instituto Superior Técnico, Portugal.

IEEE REGION 8 STUDENT PAPER CONTEST 2011

*ROOM **VA1***

HISTORY AND TRADITION

History and Tradition of SPC IEEE Region 8 Student Paper Contest (SPC) is a traditional, long lasting activity in Region 8. It is an important student, but also academic and technical activity. R8 SPC 2011 finals are being organized in Lisbon, Portugal. Although written data are not available from the very beginning, it is known that history of SPC was a long one. It is also known that SPC was already in Portugal in 80's at the R8 MELECON Conference and that winner was a Portuguese team of students. Starting from 1999, existing SPC data could be found at IEEE Region 8 SAC/SPC page http://www.r8sac.org/index.php/spc.

MAIN GOALS OF SPC ACTIVITIES

SPC was and is an important IEEE topic in many aspects, just to mention some of them: (a) SPC is an excellent occasion for personal leadership and strong involvement of student members in a prospective IEEE scientific/technical activity; (b) SPC is a very good reason and chance for activating and keeping active Student Branches; (c) it makes possible further promotion of IEEE among students; (d) it is a nice possibility for IEEE members with non-student grades - the SPC Committee (Jury) members, their colleagues (associate reviewers), Student Branch Advisers, professors - student mentors and many others to be involved and to participate in such an important and interesting IEEE student activity.

SPC GENERAL ORGANIZATION

Once each year, each Student Branch may hold and organize a local Student Paper Contest under its own responsibility. The organization of local SPC generally means that contest should be announced publicly in advance and that all submitted papers are locally reviewed by qualified specialists. Student Branch Advisers should be fully involved in all local SPC activities, as well as all other local IEEE officers (Section Chairs, Chapter Chairs, student representatives in Sections Executive Committees,…).

The winner(s) of each local Student Branch Contest may compete for the Region 8 Contest, held within the Region limits. A Branch may submit one paper for every 100 branch members or part thereof, with a maximum of three papers. An international jury is grading the written papers without knowledge of the identity of the authors and of their schools, and is deciding which papers will be accepted for presentation at the R8 Oral finals.

SPC STUDENT PARTICIPANTS

Only IEEE student members (but not doctoral students) could be authors of a paper submitted for SPC. Each student author must be a member of an IEEE Student Branch at the time of the original submission of the paper to the local Branch Contest, and a member (student or not) of the IEEE at the time of the oral presentation. The work presented has to be completed before the student receives the engineering degree that entitles him/her to start preparing a doctoral thesis.

Character of the Papers Paper should cover technical and engineering aspects of a subject reasonably within or related to the areas with which the IEEE is concerned with. The work need not be original in engineering content, but should be original in treatment and concise in coverage of the author's contribution to the subject. SPC 2011 was announced immediately after the end of the 2010 Contest.

The deadline for the 2011 IEEE Region 8 Student Paper Contest was December 15 2010. The oral finals will take place on April 27 2011, as the part of IEEE Region 8 International Conference EUROCON 2011, April 27-29 2011, Lisbon, Portugal. There were quite a number of various motivation and promotion activities within the SPC 2011 campaign. As the result, 32 papers were submitted, 29 accepted and graded, contestants were from 17 Sections and 22 Student Branches/Institutions.

The international Jury: Prof. George Paunovic, Serbia – Chair, Prof. Carlos Lopez-Barrio, Spain, Prof. Andrzej Pacut, Poland, Prof. Ali El-Mousa, Jordan, Prof. Manuel de Medeiros Silva, Portugal, was appointed to select five papers for the Oral finals and, after the Oral finals, to decide about the three winners.

After anonymous grading, Jury had selected five papers for the oral finals, from (alphabetic order) Karlsruhe Institute of Technology SB, Germany Section, Katholieke Universiteit Leuven SB, Benelux Section, National School of Engineers of Sfax (ENIS) SB, Tunisia Section, School of Electrical and

Computer Engineering SB, University of Tehran, Iran Section, University of the Witwatersrand SB, Johannesburg, South Africa Section.

During the Oral finals, one of the authors of each finalists papers will make a short presentation of their/his paper, Jury and audience will put some questions, and Jury will decide about the three best papers and awards. All finalists papers will be included in EUROCON 2011 Proceedings, IEEE Explore base and will be posted to SPC Internet pages.

My best congratulations and thanks to all IEEE Region 8 SPC 2011 participants!

Prof. George Paunovic
IEEE Region 8 SPC Coordinator

PAPERS SELECTED FOR THE ORAL FINAL

SEMI-AUTOMATIC SOFT COLLABORATIVE ANNOTATION FOR SEMANTIC VIDEO INDEXING
Amel Ksibi, Nizar Elleuch, Anis Ben Ammar, Adel M. Alimi

RESOLVING THE CONNECTIVITY-THROUGHPUT TRADE-OFF IN RANDOM NETWORKS
Ralph Tanbourgi

CONCEPTUAL IMITATION LEARNING BASED ON FUNCTIONAL EFFECTS OF ACTION
Hossein Hajimirsadeghi

MOBILE DEVICE-BASED CELLULAR NETWORK COVERAGE ANALYSIS USING CROWD SOURCING
Jaymin D. Mankowitz, Andrew J. Paverd

DESIGN OF A Ka-BAND UPCONVERTER FOR SATELLITE COMMUNICATION
Shailesh Kulkarni

TECHNICAL PROGRAM COMMITTEE

TECHNICAL PROGRAM COMMITTEE CHAIRMAN

chairman

José Carlos Pedro
Instituto de Telecomunicações, Universidade de Aveiro
Portugal

TECHNICAL PROGRAM COMMITTEE MEMBERS

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co-chairs

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Instituto Superior Técnico, Universidade Técnica de Lisboa
Portugal

José Ferreira da Rocha
Dept. de Electrónica, Telecomunicações e Informática, Universidade de Aveiro
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Portugal

Hugo Alexandre Miranda
Faculdade de Ciências, Universidade de Lisboa
Portugal

TP-3: CIRCUITS AND SYSTEMS

co-chairs

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People's Republic of China

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Portugal

TP-4: POWER SYSTEMS AND RENEWABLE RESOURCES

co-chairs

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Instituto Superior Técnico, Universidade Técnica de Lisboa
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Teresa Correia de Barros
Instituto Superior Técnico, Universidade Técnica de Lisboa
Portugal

TP-5: EDUCATION

co-chairs

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Dept. de Ingenieria Eléctrica, Electrónica y de Control,
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Portugal

TP-7: INDUSTRY APPLICATIONS

co-chairs

Paulo Nepomuceno Monteiro
Nokia Siemens Networks
Portugal

Rami Talib Mushcab
Saudi Aramco
Saudi Arabia

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André Zúquete	Portugal
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Andrejs Romanovs	Latvia
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Armando Pinho	Portugal
Armando Pinto	Portugal
Arnaldo Martins	Portugal
Arnold Pears	Sweden

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Félix Tobajas	Spain
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George Paunovic	Serbia
Gerard Lachiver	Canada

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Manuel Dominguez	Spain
Manuel Martins Barata	Portugal
Manuel Rodriguez	Spain
Manuel Valdez	Portugal
Marc Porti	Spain
Marcelino Santos	Portugal

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Marco Winzker	Germany
Marcos Curty	Spain
Maria Blesa	Spain
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Pedro Ramos	Portugal
Pedro Vieira	Portugal
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Petr Pošík	Czech Republic
Pierluigi Siano	Italy
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Rui Rocha	Portugal
Rustem Popa	Romania
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Sérgio Faria	Portugal
Sergio Martin	Spain
silvano donati	Italy
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Sophia McNamarah	*Jamaica*
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Torsten Reiners	*Germany*
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Valery Vodovozov	*Estonia*

name	country
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Vitor Costa	*Portugal*
Vitor Fernao Pires	*Portugal*
Vitor Malo Machado	*Portugal*
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TECHNICAL PROGRAM PLAN

APRIL 27

WE A1
OPENING SESSION
(Anf. GA)

9h00-10h30

9h00
Welcome Address by Organization Committee and Institutions
General Chair: *João Costa Freire*
IST: *António Cruz Serra*
IT: *Carlos Salema*
IEEE Region 8 Director: *Marko Delimar*
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9h30-10h00
Keynote Speakers' Presentation I
TBD
Innovation & Entrepreneurship: University/Industry Role

10h00-10h30
Keynote Speakers' Presentation II
Mário Campolargo
European Commission
Information Society and Media
GÉANT & e-Infrastructure

WE B1 > tel
TELECOMMUNICATION SERVICES AND APPLICATIONS
(Anf. GA)

10h50- 12h30

10h50
189. The use of conference articles as learning objects. Implementation in TAEE and EDUCON conferences

11h10
192. A Secure Wireless Point of Sale System

11h30
391. Quality Model for Monitoring QoE in VoIP Services

11h50
449. Mobile Location-Based Voice over Internet Protocol Group Call Service

12h10
418. ArQoS®: System to monitor QoS/QoE in VoIP

WE B2 > eng
ENGINEERING MANAGEMENT
(Room 01.1)

574. Prognostics-based Health Management for Telecom Equipment under Free Air Cooling

274. Invisible Technology - - Organisational Factor

312. An Integrated Model for the Environmental Impact Assessment of Highways in China

399. Solar Energy for Soil Conditioning

435. AIR: Technology Innovation for Future Spacecraft Onboard Computing Systems

WE B3 > inf
COMPUTER NETWORKS
(Room 02.2)

166. Performance Comparison of CQ Selection Policies

281. An Efficient Algorithm to Create a Loop Free Backup Routing Table

529. Ant Colony Optimization Routing Mechanisms with Bandwidth Sensing

552. Simulating Connection Dropouts in Peer-to-Peer Environments

445. Optimizing Software Development Process

WE B4 > cir
SIGNAL AND IMAGE PROCESSING I
(Room 02.1)

277. Perceptually Driven Coefficients Pruning and Quantization for the H.264/AVC Standard

300. A Real Time HDTV Motion Estimation Architecture for the New MPDS Algorithm

379. Stereo Image Coding using Dynamic Template-Matching Prediction

384. Enhanced H.264/AVC Video Streaming using Network-adaptive Multiple Description Coding

549. Computational Complexity Reduction Methods for Multiscale Recurrent Pattern Algorithms

legend

> tel
Telecommunication and Multimedia Systems

> cir
Circuits and Systems

> eng
Engineering Management

> pow
Power Systems and Renewable Resources

> inf
Information Technologies and Inteligent Systems

> edu
Education

APRIL 27

	WE C1 > tel **NEXT GENERATION NETWORKS I** *(Anf. GA)*	WE C2 > tel **MULTIMEDIA TECHNOLOGIES AND APPLICATIONS I** *(Room 01.1)*	WE C3 > inf **INFORMATION SYSTEMS** *(Room 02.2)*	WE C4 > cir **SIGNAL AND IMAGE PROCESSING II** *(Room 02.1)*
13h50-15h30				
13h50	**114.** A Comparative Study on Cost-benefit Analysis of Fiber-to-the-Home Telecommunications Systems in Europe	**004.** Reversible Visible Watermarking for H.264/AVC Encoded Video	**338.** Long-term Security of Digital Information - Assessment through Risk Management and Enterprise Architecture	**496.** Non-cyclic Deconvolution Using an Augmented Lagrangian Method
14h10	**265.** Estimating the Energy Consumption in Survivable Optical Transport Networks	**075.** Vision Based Surveillance System	**225.** Order Dependent Feature Selection In Concatenative Sound Synthesis Using Analytical Hierarchy Process	**408.** Method for Segmentation of Cardiac Signals based on Four Parameter Sine Fitting
14h30	**428.** Planning a Urban Radio over Fibre Network	**467.** Enhanced Slicing for Robust Video Transmission	**188.** Complexity of Credential Processing	**177.** Efficient Unsupervised Feature Selection for Sparse Data
14h50	**459.** CAPEX Model for PON Technology Using Single and Cascaded Splitter Schemes	**289.** Multimedia Content Aggregator applied to an IPTV Content-Zapping Service	**086.** Towards the Initial Conceptual Database Model through the UML Metamodel Transformations	**403.** Recursive 2D Filters Designed in Polar Coordinates
15h10	Invited Industry Application I	**421.** Semi-reliable Transport for IPTV over Mobile WiMAX	**291.** Applying source code analysis techniques. A case study for a large mission-critical software system	**264.** Analysis of Error Correcting Codes for the Secure Storage of Biometric Templates

	WE D1 > tel **NEXT GENERATION NETWORKS II** *(Anf. GA)*	WE D2 > tel **MULTIMEDIA TECHNOLOGIES AND APPLICATIONS II** *(Room 01.1)*	WE D3 > cir **MATERIALS AND ELECTRONIC DEVICES** *(Room 02.2)*	WE D4 > cir **SYSTEM IDENTIFICATION AND CONTROL** *(Room 02.1)*
16h20-18h00				
16h20	**540.** Design and Construction of a Wireless Sensor and Actuator Network Gateway based on 6LoWPAN	**294.** Talking Avatar for Web-based Interfaces	**102.** A Novel Approach In Recognizing Magnetic Material With Simplified Algorithm	**090.** Filtering approaches for online identification of GMS friction model
16h40	**186.** Multi-Band OFDM Networking Concepts	**329.** Efficient Big Brother Networks	**267.** Organic photovoltaic cells with structured interfaces	**168.** Prognosis of gear health using Gaussian process model
17h00	**226.** Performance of a Heterogeneous Network with UMTS, Wi-Fi and WiMAX	**356.** Efficient Scalable Coding of Video Summaries using Dynamic GOP Structures	**305.** Biocellulose Based Materials for Organic Field Effect Transistors	**443.** Digital LQR Control with Kalman Estimator for DC-DC Buck Converter
17h20	**331.** Cluster Cooperation for Energy Saving in Wireless Personal Networks	**494.** Browsing Videos by Automatically Detected Audio Events	**319.** Electrical Properties of a Single Molecule	**453.** Mixed Virtual Reference Feedback Tuning - It ative Feedback Tuning Approach to the Position Control of a Laboratory Servo System
17h40	**184.** Optimal Routing in Multiple Carrier VoIP Networks	**546.** 3D Holoscopic Video Coding using MVC	**508.** Industrial electrostatics perforation improvement by power controled discharges	**171.** Disturbance Compensation in Digital Sliding Mode
18.30	Departure for Reception			

APRIL 27

14h50 -16h50

WE PM > tel

POSTER SESSION

Lobby / Level 02

436. Improving Domotic Services Combining a Dialog System and a Resident Tracking System

450. Architecture and Traffic Modelling of a Utility Metering Wireless Sensor Network

487. Indoor/Outdoor Management System Compliant with Google Maps and Android® OS

386. Relieving Routing Loops through TTL Relaxation

432. Context-Based Connectivity in Wireless Mesh Networks: Analytical vs Simulation Studies

442. A Platform for Operator-Driven Network Virtualization

474. FTP@VDTN - A File Transfer Application for Vehicular Delay-Tolerant Networks

539. The Application of JADE and OSGi Technologies in the Telecommunications Services Architecture

469. Business Evaluation for FUTON-like Architectures

099. Integration of SIP protocol in Android Media Framework

122. Open Access to Charging Functions in Multimedia Networks

123. Third Party Control On Instant Messaging

152. Automatic Convertion of Scientific Data in a Canonical Format

173. The Possibility of Application the Optical Wavelength Division Multiplexing Network for Streaming Multimedia Distribution

180. Design and Implementation of Mouth-Controlled Mouse System

414. Best practices in iPhone programming

455. Basic management strategies on KASKADA platform

548. Assessing the integration of ontology tools in Content Network architectures

WE PM > eng

154. Value Distilled: A framework based approach to establish the trace of Technology Value in the context of Engineering Management

233. Value Creation in Portugal

276. A Secure Negotiable On-demand Services Model for Cloud Environment

WE PM > inf

561. A spatiotemporal model of events within a BDI

162. Aggregation of Non-Holonomic Wheeled Mobile Robots in an Attractant/ Repellent Environmental Profile

423. The HTP Tool: Monitoring, Detecting and Predicting Hypotensive Episodes in Critical Care

095. Disaster Recovery Planning & Methodology for Process Automation Systems

424. A Survey on Data Security in Data Warehousing: Issues, Challenges and Opportunities

515. Risk Management, Open-Source Approach

WE PM > cir

241. A New Method in Medical Image Registration Based on Mutual Information and Landmark

139. An Enhanced Iterative Blind Deconvolution Algorithm

375. An improved edge profile based method for text detection in images of natural scenes.

385. Biometric Identification through Palm and Dorsal Hand Vein Patterns

390. A Real Time Global Motion Compensation For Multi-Exposure Imaging Algorithms

533. Refractive Index Characterization of Waveguide Channels Using Spectroscopic Ellipsometry

501. Fuzzy Logic Controller Support to Passengers' Comfort for Electric Train Coach Heating System

480. Model based implementation of supervisors and diagnosers in VHDL code of programmable systems

APRIL 28

	TH A1 › tel WIRELESS COMMUNICATIONS I (Anf. GA)	TH A2 › tel ANTENNAS (Room 01.1)	TH A3 › tel OPTICAL COMMUNICATIONS I (Room 02.2)	TH A4 › cir MODELING SIMULATION (Room 02.1)
08h30-10h10				
08h30	**203.** Detection of Colliding Users in OFDM based Random Access Networks	**495.** Increasing the convergence rate of distributed beamforming	**415.** Raman Amplifier Undepleted Pump Model Customization to Include Pump-to-Pump Interactions	**256.** Bandwidth modeling and optimization of PIN photodiodes
08h50	**214.** Rotation Matrices for OFDM Transmission	**150.** Microstrip antenna for vehicular communications with improved axial ratio band	**491.** Optimizing the Nonlinear Operator in Backward Propagation	**103.** Design of Low Cost PC-based Simulators for Education and Training Purpose Using DDS
09h10	**481.** Distributed beamforming in OFDM-based systems over frequency-selective channels	**182.** Compact Printed Monopole Anntenna Array for Dual-band WLAN Application	**238.** Optical Hard Limiter Impact on the Performance Analysis of an Optical OV-CDMA System	**251.** Advanced Time-Domain Techniques for Strongly Nonlinear RF Circuit Simulation
09h30	**521.** Perfect DFT Sequences Transformed Into Orthogonal Sequences	**378.** Tapered Waveguide Feed for Integrated Dielectric Lens Antenna Performance Evaluation	**420.** Dual Band Signal Generation for Millimeter-wave RoF Systems with Subcarrier Multiplexing	**372.** A Geometric Approach of a Battery Mathematical Model for On-Line Energy Monitoring
09h50	**295.** Correlation of Spreading Sequences Combined with Nonlinear OQPSK Signals	**464.** Modelling and Measurements of the Directional Spectra of Scatter Signals Inside a Formation of Tree Trunks	**576.** Photonic Instantaneous RF Frequency Measurement System based on Complementary Modulation	**374.** A Geometrical Point of View Over a Battery Mathematical Model
	TH B1 › tel **WIRELESS COMMUNICATIONS II** *(Anf. GA)*	**TH B2** › tel **RADIO PROPAGATION I** *(Room 01.1)*	**TH B3** › tel **OPTICAL COMMUNICATIONS II** *(Room 02.2)*	**TH B4** › cir **ANALOG INTEGRATED CIRCUITS I** *(Room 02.1)*
11h00-12h40				
11h00	**231.** BER Performance of MIMO OFDM-CDMA System in Ricean Fading Channel	**178.** Design and Analysis of Frequency-Selective Surfaces for Ultrawideband Applications	**307.** Controlling the properties of Fiber Bragg Gratings based on the Acousto-Optic modulation	**499.** Application of Pulse-Width Modulated Pre-Emphasis in Closely-Spaced Transmission Lines with Additional Discontinuities
11h20	**320.** The Second-order Statistics of One Ring MIMO Model and its Applications	**250.** Measurement of the Specific Absorption Rate Using a Single Electric Field Sensor	**290.** Impact of Collocated Regeneration and Differential Delay Compensation in Optical Transport Networks	**530.** A 130 nm CMOS LNA for 30 GHz Applications
11h40	**321.** Application of LDPC Codes on the MIMO Channel Model Based on the Geometrical One-ring Scattering Model	**454.** Dispersion Diagrams of Waveguides Filled with Indefinite Media	**493.** Simplified Technique for the Design of Multichannel Dispersion Compensation FBG	**567.** A Linearity-Improved Ultra-Wideband Balun-LNA for Cognitive Radio
12h00	**422.** Maximizing Performance using MIMO Techniques for 4th Generation Mobile Communication Systems	**461.** Development and Performance Analysis of a Real Time High-Resolution Channel Sounder – IF Stage	**511.** Design, Development and Performance Analysis of DSSS-based Transceiver for VLC	**380.** A Voltage-Controlled Amplifier Based on Gm Cells for Multistandard OFDM Integrated Receivers
12h20	**514.** Performance Evaluation of Conventional and MMSE Multiuser Detection Algorithms with Different Spreading Signature Codes	**528.** Analysis of dielectric optical ring slab waveguides with interband absorption	Invited Industry Application II	**304.** A Novel High-Data-Rate Low-Complexity BPSK Demodulator for Telemetry Systems

APRIL 28

TH C1 > tel
WIRELESS COMMUNICATIONS III
(Anf. GA)

13h50-15h30

13h50
342. Design of a Battery-free Wireless Sensor Node

14h10
475. Decision Making Based on Localized Auctions in Wireless Sensor Networks

14h30
365. Facilities of Digital Modulation Techniques and Conversion Schemes in Underground Multiuser Systems

14h50
503. A Front-End to Vehicular Communications

15h10
354. Performance Evaluation of Energy Efficient Routing Protocols for Wireless Sensor Networks

TH C2 > tel
RADIO PROPAGATION II
(Room 01.1)

079. Simulation of Envelope-Phase Arbitrarily Distributed Fading Channels: a Versatile Method Based on the Metropolis Algorithm

563. Analysis of the dRET input parameters under varying wind conditions at 20 GHz

570. Experimental characterisation of WiMAX propagation in different environments

159. Avegare Fade Duration for Dual Selection Diversity over Correlated Rician Fading Channels in the Presence of Cochannel Interferences

161. Conical Refraction in Generalized Biaxial Media - A Geometric Algebra Approach

TH C3 > cir
INSTRUMENTATION AND MEASUREMENT
(Room 02.2)

572. A novel uniform eddy current probe with GMR for Non Destructive Testing Applications

314. Computer as a tool for controlling measurement of water content in building materials

466. Textile moisture sensor matrix for monitoring of disabled and bed-rest patients

571. Portable Eddy Current NDT Instrument Using Two Different Implementations

446. A new Monitoring and Data logger System for Industrial Cooling Equipment Applications

TH C4 > cir
ANALOG INTEGRATED CIRCUITS II
(Room 02.1)

456. Comaparision of Two Different Architectures of Multichannel Readout ASICs for Neurobiological Experiments

239. Synthetic Inductor Based Resonators Using DVCCTA

228. Improved Accuracy Thermal Nanostructure

244. Design Procedure for Settling Time Minimization in Three-Stage RNMC Amplifiers

370. Implementation of a programmable neuron in 0.35μm CMOS process for muli-layer ANN applications

TH D1 > tel
WIRELESS COMMUNICATIONS IV
(Anf. GA)

16h20-18h00

16h20
292. Realistic Mobility Modeling of Pedestrian Traffic in Wireless Networks

16h40
299. ZigBee/GPS Tracking System for Rowing Races

17h00
388. Experimental Evaluation of IEEE 802.11e EDCA QoS Mechanism for Voice over WLAN

17h20
506. QoS Control and Analysis for LTE Networks

17h40
523. General Interference Analysis of M-QAM Transmission Applied to LTE Performance Evaluation

TH D2 > tel
MICROWAVE FILTERS AND QUANTUM EFFECTS IN INFORMATION AND TRANSMISSION
(Room 01.1)

279. Critical Issues in Polarization Encoded Quantum Key Distribution Systems

426. Polarization-Entangled Photon Pairs Using Spontaneous Four-Wave Mixing in a Fiber Loop

507. Simulation Performance of All-Optical Logic Gate XOR at 40 Gbit/s Using Quantum-Dot SOAs

263. Metamaterial Millimeter Wave Devices on Silicon Substrate: Band-Pass Filter and Directional Coupler

448. New Microstrip Bandpass Filter Configuration with Improved Attenuation of One Adjacent Channel

TH D3 > cir
EMBEDDED AND REAL TIME SYSTEMS
(Room 02.2)

315. Adaptability and Survivability in Spaceborne Time- and Space-Partitioned Systems

347. An Approach to Generating C Code with Proven LTL-based Properties

534. A Design of a General Purpose User Interface for Real-Time Embeded Systems

248. FPGA Implementation of Multiple Hardware Watchdog Timers for Enhancing Real-Time Systems Security

Invited Industry Application III

TH D4 > cir
DIGITAL INTEGRATED CIRCUITS
(Room 02.1)

164. Dual Time Delay Digital Tanlock Loop with Improved Performance

431. Conversion of Two- to Four-Phase Delay-Insensitive Asynchronous Circuits

273. A Comparative Study of Nanowire Crossbar and MOSFET Logic Implementations

369. Performance Improvement of Differential Static CMOS Logic Family

364. A New Low-Power, Low-area, Parallel Prefix Sklansky Adder with Reduced Inter-Stage Connections Complexity

APRIL 28

TH AM > tel

09h30-11h30

POSTER SESSION

Lobby / Level 02

179. Generalized Secure Hash Algorithm: SHA-X

266. Privacy and usability in SMS-based G2B/B2G m-Government

458. Design of Filters For Reliable and Secure Communications: Conditional Mean Estimation at the Eavesdropper

465. A Cryptanalytic Attack on a Class of Cryptographic Sequence Generators

111. WiMAX Wireless Broadband as Viable Alternative for European Operators?

213. Robust Channel Estimation for Broadband Satellite Communications

504. A Streaming Application for Vertical Handover Testing in Wireless Hybrid Access Networks

551. Experience-based Radio Access Technology Selection in Wireless Environment

163. Quantifying the Influence of Crosstalk-Crosstalk Beat Noise in Optical DPSK Systems

280. All-Optical Flip Flop Using Two Gain-Clamped RSOAs

308. Adaptive gain equalization on optical amplifiers based on the Acousto-Optic effect using a single Long Period Grating

392. GUI model for simulation of steady state Erbium dopped fiber amplifiers

400. Transmission Performance of 60 GHz Signals Generated by OSSB Upconversion

439. Performance Analysis of Ethernet Passive Optical Networks with High Load through a Hybrid Analytical/Simulated Model

463. Simulation of Digital Optical Receiver of Intensity Modulation and Direct Detection

471. Optical Signal to Noise Ratio Monitoring with Hi-Bi Fiber Bragg Grating

535. Reflected Light from the Fiber Fuse Propagation

536. Dispersion engineered high index contrast silica microfibers

524. SBS Induced Four-Wave Mixing in Ultra Dense WDM Systems

TH AM > cir

348. A RC model for multiwalled carbon nanotubes as interconnects

473. VHDL Structural Model Visualization

107. A novel condition for Hamiltonicity; Constructing Hamilton circuits

158. Contributions on Sensitivity Analysis for the Analog Two-Port Networks in Non-sinusoidal Regime

TH PM > tel

14h50-16h50

POSTER SESSION

Lobby / Level 02

120. Photonic Band-Gap Surface with Electronically Reconfigurable Geometry

283. Parametric Study of the Loss Characteristics of PZT-Based MMIC Transmission Lines

377. Optimum Design of Microwave Oscillator using Hopfield Neural Network

397. Cable Parameters Identification for DSL Systems

476. Wideband Microstrip Patch Antenna Exploiting a New Ceramic Fractal Structure

575. 3x3 Multibeam Network for a Triangular Array of Three Radiating Elements

441. Statistical Characterization of a Single-Photon Source Based on Stimulated FWM in Optical Fibers

TH PM > cir

221. Fully Differential Baseband Pulse Generator for IEEE 802.15.4a standard

240. Third Order Lowpass Butterworth Characteristic Realization Using DBTA

317. Settling time Optimization in Three-stage Amplifiers with Reversed Nested Miller Compensation

419. A New Optimization Method for Yield Enhancement of the Electronic Circuits Based on Tolerance Design

497. High performance clock generation and distribution for a LTE transceiver synchronization

509. Contactless Battery Charger for Composite Humidity and Temperature Wireless Sensors

542. A 1.8V/5.2GHz WLAN CMOS RFIC Receiver

284. Automatic Meters Reading for Water Distribution Network in Talsi City

427. Application of Compensation Techniques in a dsPIC based Impedance Measuring System

489. A 5GHz LNA for a Radio Astronomy experiment

100. A Technique for Automatically Reprogramming an Embedded Linux System

513. The Identification System for Monitoring of Teaching Activities

553. High Availability in Controller Area Networks

522. Ethernet Communication Platform for synthesized devices in Xilinx FPGA

18h30

Bus Departure for the Gala Dinner

APRIL 29

	FR A1 > pow **POWER GENERATION** *(Anf. GA)*	FR A2 > pow **INDUCTION MOTOR DRIVES** *(Room 01.1)*	FR A3 > pow **POWER QUALITY APPLICATIONS** *(Room 02.2)*	FR A4 > pow **CONVERTERS FOR RENEWABLE ENERGY APPLICATIONS** *(Room 02.1)*
08h30-10h10				
08h30	**131.** Transient Stability and Voltage Regulation Improvement of Multimachine Power System	**125.** An Adaptive Sliding Mode Position Control for Induction Motor Drives	**077.** Phase-Locked Loop Topology Based on a Synchronous Reference Frame and Sliding Mode Approach for DVR Applications	**205.** A New Modulation Technique for Reduced Harmonic Distortion of Current in PV Inverters
08h50	**141.** Modelling and Control of SCIG applied to Variable Speed Wind-Energy Systems Connected to the Grid	**313.** MRAS sensorless based control of IM combining sliding-mode, SVPWM, and Luenberger observer	**080.** Dynamic Voltage Restorer Using a Multilevel Converter with a Novel Cell Structure	**098.** Computer Simulations of a Converter Control Malfunction on PMSG-Based Wind Turbines
09h10	**210.** Long-term Dynamic Modeling of Renewable Energy Sources	**566.** Application of Radial Basis Neural Networks for the Rotor Fault Detection of the Induction Motor	**224.** Fault-Tolerant Design for a Three-Level Neutral Point Clamped Multilevel Inverter Topology	**298.** Synchronization of a single-phase photovoltaic generator with the grid
09h30	**323.** A reduced model of Permanent Magnet Synchronous Generators for Wind Energy Conversion Systems	**577.** Performance Analysis of the Sensorless Induction Motor Drive System under Faulted Conditions	**543.** Combining Mechanical Commutators and Semiconductors in Fast Changing Redundant Inverter Topologies	**336.** Dual Input Hybrid DC-DC Converters
09h50	**402.** Cascade Disruption of Generation – Using Adversity for Learning & Improvement	**579.** Performance of a High-Power Induction Motor Supplied by Two In-Phase Voltage-Source Inverters	**097.** Automatic control system of a three-phase shunt active power filter using the method of “equivalent sinusoid”	**335.** Low Speed PM Generator for Direct-Drive Wind Applications
11h00-12h40	FR B1 > pow **ENERGY TRANSMISSION AND DISTRIBUTION I** *(Anf. GA)*	FR B2 > pow **ELECTROMAGNETIC DRIVES I** *(Room 01.1)*	FR B3 > edu **E LEARNING I** *(Room 02.2)*	FR B4 > edu **INNOVATIVE COURSES AND LABORATORIES I** *(Room 02.1)*
11h00	**245.** New EEM/BEM Hybrid Method for Electric Field Calculation in Cable Terminations	**541.** Vibration Analisys of a Linear Switched Reluctance Actuator	**132.** Biometric Verification System in Moodle & the Analysis in Lab Exams	**106.** Reducing the entrance hurdle in Embedded System Engineering courses
11h20	**286.** Experimental Results of ELF Electric and Magnetic Fields of Electric Power System in Bosnia and Herzegovina	**554.** Modeling the Electric Chain of an Electric Boat	**133.** How to make attractive the teaching of relativistic electrodynamics?	**525.** Logic Emulators in Digital Systems Education
11h40	**296.** Skin Effect and Proximity Effect in a Real, High Voltage, Double Three-phase System	**510.** Robust Model Predictive Speed Control of the Drive System with an Elastic Joint	**373.** Implementing Content Packaging Standards	**096.** Remote Access Laboratory for Analog and Digital Electronic Course
12h00	**215.** On-Line Insulation Assessment of HV Cables Employing Novel PD Features and AdaBoost	**368.** Deep Bar Effects Produced by PWM Power Supplies in Induction Machines: Application to Rotor Parameters Determination	**559.** Online Technology CAD Laboratory for Microelectronics Education	**346.** MATLAB Simulation Applied to Study the Mechanism of Load Balancing by Unbalanced Capacitive Shunt Compensation in a Three-Phase Three-Wire Network
12h20	**230.** Fault Location in Three-Terminal Power Transmission Lines by TT-Transform Based Features	**371.** Sensor-Based Fixed-Point DSP Control of a 8/6 Switched Reluctance Motor	**520.** 3D Modeling Educational Environment	**297.** Formative assessment of laboratory work

APRIL 29

FR C1 > pow
ENERGY TRANSMISSION AND DISTRIBUTION II
(Anf. GA)

13h50-15h30

13h50
204. Voltage regulation in low-voltage rural feeders with distributed PV systems

14h10
349. Procedure for Determining the Response of the System Load to Voltage Sags. Part 2: The Analyzing Metodology

14h30
353. Deregulated Environment Transmission Expansion Planning

14h50
358. Comparison of Power System Tracing Cost Allocation Methods

15h10
359. Probabilistic and Deterministic Load Flows Methods in Power Systems Reliability Estimation

FR C2 > pow
ELECTROMAGNETIC DRIVES II
(Room 01.1)

156. DC Motor Drive with high Torque at low Speed

149. Analisys of the DFIG During Voltage Dips

518. Application of an adaptive fuzzy sliding-mode controller based on the 2 type fuzzy sets for the two-mass system

413. Study Above an Adaptive Control Structure With Aplication at the Double-Fed Induction Generator's Excitation

197. Real-time Efficiency Optimisation of Open-Loop Controlled Synchronous PM Motor Drive Using Adaptive Neural Networks

FR C3 > edu
E LEARNING II
(Room 02.2)

191. Assembler Through The Looking Glass: Understanding Digital Systems

212. Network Infrastructure for Academic IC CAD Environments

382. Integrating Games from an External Provider in the PoEML E-learning Platform

502. Watching a Processor at Work- a self-explanatory simulator and illustrator for the MC8 microprocessor

485. The New Digital Media in Educating Computer Engineering Students for in-Company Communication

FR C4 > edu
INNOVATIVE COURSES AND LABORATORIES II
(Room 02.1)

169. Catch the Mark: teaching data hiding by gaming

252. An improved way for evaluating competences. A different approach to project management learning.

306. An Innovative Laboratory Course of Organic Electronics

381. Experimentation with Optimization Problems in Algorithm Courses

532. Structured analysis of alternative evaluation approaches of lab sessions in engineering education

FR D1
CLOSING SESSION
(Anf. GA)

16h30-18h00

Pannel Discussion
Renewable Energies and Smart Grid
Chair: *António Vidigal, CEO EDP Inovação*

Presentation of EuroCon-2011 Next Venue
General Chair: *Mislav Grgic, University of Zagreb, Croacia*

Closing Remarks
General Chair: *João Costa Freire*

APRIL 29

FR AM > pow

POSTER SESSION

09h30 -11h30

Lobby / Level 02

472. Analysis of a Monolithic Buck Converter's pMOS Switch During Turn Off

104. A model-based approach for a dimming high efficiency control/power LED driver

259. Discontinuous Space Vector Modulation Technique for Motor Supply

170. Direct Lightning Surge Analysis in Wind Turbines using Electromagnetic Transients Computer Program

569. 220 kV and 400 kV Power Plant Electromagnetic Pollution Analysis

172. Using high-power electromagnetic energy for careful sorbent regeneration

325. Calculation of Magnetic Field Intensity

505. Calculation of inductance of conductors for overhead power lines

337. Compact Fluorescent Lamps Electro-magnetic Compatibility Measurements and Performance Evaluation

151. A Nonlinear Observer for Synchronous Generator Damper Currents

183. High Level Controller in the Electro-Mechanical Drive Train

326. Experimental Model of a Hydrogen-erator with Static Excitation

564. Characterization of the Fringing Window of a Magnetic Core

581. On the Computation of Rotor Losses through a Set of Harmonic Finite Element Analyses in Fractional-Slot Concentrated-Coil Permanent-Magnet Machines

FR AM > edu

176. Applied Electronics Curriculum for Computer Science Students

249. Educational Thesaurus on Power Electronics

433. The Intuitive Approach to Engineering Design of a Multi-Cultural Group of Engineering Students

444. An Interdisciplinary Masters Program in Microwave Communication Focused on Innovation (Attracting and developing students' talent in challenging times)

268. The Possibilities of Implementation of M-Education in the Republic of Serbia

310. A motivational teaching-learning process based on the student's interest: high level of education

ABSTRACTS

EUROCON > 2011 conftele 2011