

# **2014 6th International Symposium on Communications, Control and Signal Processing**

**(ISCCSP 2014)**

**Athens, Greece  
21-23 May 2014**



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## Wednesday, 21.05.2014

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### **W1L-A      Special Session: Security in Distributed and Cloud Storage Systems**

Time:            10.00-11.30

Room:           Aegean Sea

Organizer(s): Camilla Hollanti (Aalto University, Finland) and H. Vincent Poor (Princeton University, USA)

Chair:           Camilla Hollanti (Aalto University, Helsinki, Finland)

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Time:	10.00-11.30
Room:	Corfu-I
Chair:	Constantine Kotropoulos (The University of Thessaloniki, Greece)
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## Wednesday, 21.05.2014

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### **W1L-C      Special Session: Measurement Based-Model-Free Approach to Engineering Design**

Time:            10.00-11.30

Room:           Corfu-II

Organizer(s): Shankar P. Bhattacharyya (Texas A&M University, USA) and Lee H. Keel (Tennessee State University, USA)

Chair:           Shankar P. Bhattacharyya (Texas A&M University, USA)

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### **W2L-A      Special Session: Pattern Recognition and Compression in Image and Video**

Time:           **11.50-13.20**

Room:          **Aegean Sea**

Organizer(s): **Alex Kot (Nanyang University of Technology, Singapore)**

Chair:          **Alex Kot (Nanyang University of Technology, Singapore)**

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Time:            11.50-13.20

Room:           Corfu-II

Organizer(s): Lajos Hanzo (University of Southampton, U.K.)

Chair:           Constantinos B. Papadias (Athens Information Technology, Greece)

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Room:           Crete

Chair:          Akira Taguchi (Tokyo City University, Japan)

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### **W3L-A      Special Session: Audio Signal Processing**

Time:           **15.40-17.10**

Room:           **Aegean Sea**

Organizer(s):   **Rudolf Rabenstein (University of Erlangen-Nürnberg, Germany)**  
                         **and Sascha Spors (University of Rostock, Germany)**

Chair:           **Rudolf Rabenstein (University of Erlangen-Nürnberg, Germany)**

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**W3L-B**

### **Special Session: Feedback in Multiuser Communications**

Time: **15.40-17.10**

Room: **Corfu-I**

Organizer(s): **Petros Elia and Dirk Slock (Eurecom, Biot, France)**

Chair: **Dirk Slock (Eurecom, Biot, France)**

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Time:            15.40-17.10

Room:           Corfu-II

Organizer(s): Petros Ioannou (University of Southern California, USA)

Chair:           George Papavassilopoulos (National Technical University of Athens, Greece)

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Time: 15.40-17.10

Room: Crete

Chair: Ove Edfors (Lund University, Sweden)

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Time:            10.00-11.30

Room:           Aegean Sea

Organizer(s): Visa Koivunen (Aalto University, Finland)

Chair:           Visa Koivunen (Aalto University, Finland)

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Time:            10.00-11.30

Room:           Corfu-I

Organizer(s): Marika Di Benedetto and Alessandro D'Innocenzo (University of L'Aquila, Italy)

Chair:           Marika Di Benedetto (University of L'Aquila, Italy)

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Time: 10.00-11.30

Room: Corfu-II

Organizer(s): Tomáš Vyhlídal and Vladimír Kučera (Czech Technical University in Prague, Czech Republic)

Chair: Vladimír Kučera (Czech Technical University in Prague, Czech Republic)

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Time: 10.00-11.30  
Room: Crete  
Chair: Ralf R. Müller (University of Erlangen-Nuremberg, Germany)

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Time:            11.50-13.20

Room:           Aegean Sea

Chair:           Alessandro Neri (University Roma 3, Italy)

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## Thursday, 22.05.2014

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### **T2L-B      Special Session: Energy Aware Communications Systems**

Time:            11.50-13.20

Room:           Corfu-I

Organizer(s): Shuguang Cui (Texas A&M University, Texas) and Rui Zhang (National University of Singapore, Singapore)

Chair:           Rui Zhang (National University of Singapore, Singapore)

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Time:           **11.50-13.20**

Room:           **Corfu-II**

Chair:           **Vijay Kumar (Indian Institute of Science, India)**

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## Thursday, 22.05.2014

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**T2P      Control Theory and Applications**

Time:      11.50-13.20

Room:      Crete

Chair:      Abdullah Al-Badi (Sultan Qaboos University, Oman)

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## Thursday, 22.05.2014

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### **T3L-A      Special Session: Information Theoretic Methods in Signal Processing**

Time: **15.40-17.10**

Room: Aegean Sea

Organizer(s): Jaakko Astola and Ioan Tabus (Tampere University of Technology, Finland)

Chair: Jaakko Astola (Tampere University of Technology, Finland)

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Alexey Roenko; Vladimir Lukin (National Aerospace University, Ukraine); Igor Djurović; Marko Simeunović (University of Montenegro, Montenegro)

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Corneliu Rusu (Technical University of Cluj-Napoca, Romania)

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## Thursday, 22.05.2014

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### **T3L-B      Special Session: Feedback in Communications Systems**

Time:            15.40-17.10

Room:           Corfu-I

Organizer(s): Markus Rupp (Technical University of Vienna, Austria)

Chair:           Markus Rupp (Technical University of Vienna, Austria)

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Stefan Schwarz; Markus Rupp (Vienna University of Technology, Austria)

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George A Ropokis (Research Academic Computer Technology Institute, Greece);  
David Gesbert (Eurecom Institute, France); Kostas Berberidis (University of  
Patras, Greece)

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Martin Böck; Andreas Kugi; Christoph F Mecklenbräuker (Vienna University of  
Technology, Austria)

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Samir M. Perlaza (INRIA, France); Ravi Tandon (Virginia Tech, USA); H. Vincent  
Poor (Princeton University, USA)

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José P González-Coma (University of A Coruña, Spain); Michael Joham  
(Technische Universität München, Germany); Paula M. Castro; Luis Castedo  
(University of A Coruña, Spain)

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## Thursday, 22.05.2014

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**T3L-C      Special Session: Recent Advances in Control and Applications II**

Time:            **15.40-17.10**

Room:          **Corfu-II**

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Nicos Karcanias (Systems and Control Research Centre, UK); John Leventides; Maria Livada (City University London, United Kingdom)

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Panagiotis Kontogiorgos; George Papavassilopoulos National Technical University of Athens, Greece)

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Michalis Thanou; Anthony Tzes (University of Patras, Greece)

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## Thursday, 22.05.2014

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### **T3P      Signal Processing and Telecommunications**

Time:      15.40-17.10

Room:      Crete

Chair:      Kaoru Arakawa (Meiji University, Japan)

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Luis David Avendaño-Valencia; Spilos Fassois (University of Patras, Greece)

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Magdy T. Hanna (Fayoum University, Egypt)

#### **T3P.3      Antenna Switching based on the relation between the relative location of array elements for High Resolution 2-D DOA Estimation 437**

Yuki Doi; Koichi Ichige; Hiroyuki Arai (Yokohama National University, Japan); Hiromi Matsuno (KDDI R&D Laboratories Inc., Japan); Masayuki Nakano (KDDI R&D Labs, Japan)

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Pamela Begovic (University of Sarajevo, Bosnia and Herzegovina)

#### **T3P.5      Resolving Diversely-Polarized Manifold Ambiguity using Planar Substrate Placement 445**

Supawat Supakwong (Thammasat University, Thailand)

#### **T3P.6      Performance analysis of polarimetric radar detectors 449**

Yong Yang; Shunping Xiao; Dejun Feng; Feng Zhao; Jianhua Yang; Letao Xu (National University of Defense Technology, P.R. China)

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## Friday, 23.05.2014

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### **F1L-A      Special Session: Signal Processing Techniques for Future Mobile Networks**

Time:            10.00-11.30

Room:           Aegean Sea

Organizer(s): Maurice Bellanger (CNAM, France)

Chair:           Maurice Bellanger (CNAM, France)

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Eleftherios Kofidis (University of Piraeus, Greece)

#### **F1L-A.2      Waveform contenders for 5G - OFDM vs. FBMC vs. UFMC 457**

Thorsten Wild; Frank Schaich (Bell Labs, Alcatel-Lucent AG, Germany)

#### **F1L-A.3      A PAPR upper bound of Generalized Waveforms for Multi-Carrier modulation systems 461**

Marwa Chafii (Supélec, France); Jacques Palicot (IETR/Supélec, France); Rémi Gribonval (INRIA, France)

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Yao Cheng (TU Ilmenau, Germany); Peng Li (University of York, United Kingdom); Martin Haardt (Ilmenau University of Technology, Germany)

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**Friday, 23.05.2014**

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**F1L-B      Special Session: New Trends in Code and Signal Design  
for Digital Communications**

Time:      10.00-11.30

Room:      Corfu-I

Organizer(s): Johannes Huber (University of Erlangen-Nuremberg, Germany)

Chair:      Johannes Huber (University of Erlangen-Nuremberg, Germany)

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Heidi Steendam (Ghent University, Belgium)

**F1L-B.2      Low Complexity Decoding for Higher Order Punctured Trellis-  
Coded Modulation Over Intersymbol Interference Channels 475**

Fabian Schuh (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany);  
Johannes Huber (University of Erlangen-Nuremberg, Germany)

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## Friday, 23.05.2014

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### **F1L-C      Special Session: Modeling and Control of Complex Network**

Time:            10.00-11.30

Room:           Corfu-II

Organizer(s): Tamer Basar (University of Illinois, USA)

Chair:           Tamer Basar (University of Illinois, USA)

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Ziyang Meng; Dimos Dimarogonas; Karl Henrik Johansson (Royal Institute of Technology, Sweden)

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Nicolaos Manitara; Christoforos Hadjicostis (University of Cyprus, Cyprus)

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Dario Bauso (Università degli Studi di Palermo, Italy); Tamer Başar (University of Illinois at Urbana-Champaign, USA)

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Jingjin Yu (MIT, USA); Soon-Jo Chung; Petros Voulgaris (University of Illinois at Urbana-Champaign, USA)

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John Baras (University of Maryland, College Park, USA)

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## Friday, 23.05.2014

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### **F2L-A      Special Session: Sensor Signal Processing for Defense**

Time:            11.50-13.20

Room:           Aegean Sea

Organizer(s): Jonathan Chambers (Loughborough University, UK)

Chair:           Jonathan Chambers (Loughborough University, UK)

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Jing Dong; Wenwu Wang (University of Surrey, United Kingdom)

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Anastasia Panoui; Sangarapillai Lambotharan; Jonathon A Chambers (Loughborough University, UK)

#### **F2L-A.4      Estimating Adaptive Coefficients of Evolving GMMs for Online Video Segmentation 513**

Ioannis Kaloskampis (Cardiff University, United Kingdom); Yulia Hicks (Cardiff Uni, United Kingdom)

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## Friday, 23.05.2014

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- F2L-B**      **Special Session: Communication Techniques for Licensed Shared Access**
- Time:            11.50-13.20  
Room:           Corfu-I  
Organizer(s): Constantinos Papadias (Athens Information Technology, Greece)  
                      and Dirk Slock (Eurecom, Biot, France)  
Chair:           Constantinos Papadias (Athens Information Technology, Greece)
- 
- F2L-B.1**      **Decoupled, Rank Reduced, Massive and Frequency-Selective Aspects in MIMO Interfering Broadcast Channels 517**  
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Nick Taramas; George C. Alexandropoulos; Constantinos B. Papadias (Athens Information Technology, Greece)
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- F2L-B.4**      **A Cooperative Power Control Scheme For Interference Management in LTE-Advanced Based Cognitive Radio Networks 530**  
Oscar Dario Ramos-Cantor (Technische Universität Darmstadt, Germany); Jakob Belschner (Telekom Innovation Laboratories, Germany); Marius Pesavento (Technische Universität Darmstadt, Germany)

**F2L-C      Multimedia**

Time:      **11.50-13.20**

Room:      Corfu-II

Chair:      Stephen Marshall (University of Strathclyde, UK)

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Youngchun Kim; Ahmed Tewfik (University of Texas, Austin, USA)

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George Athanasiou (Antcor-Advanced Network Technologies S.A., Greece); George-Paris Makkas; Georgios Theodoridis (University of Patras, Greece)

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Stelios Krinidis (Informatics and Telematics Institute, Greece); Georgios Stavropoulos (Information Technologies Institute - CERTH, Greece); Dimosthenis Ioannidis (Information Technologies Institute, Greece); Dimitrios Tzovaras (Information Technologies I

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Federica Battisti; Marco Carli; Alessandro Neri (University of ROMA TRE, Italy)

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## Friday, 23.05.2014

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**F2P**

### **Applications and Implementation**

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11.50-13.20

Room:

Crete

Chair:

Corneliu Rusu (Technical University of Cluj-Napoca, Romania)

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Rita Ammanouil; Jean Abou Melhem (USEK, Lebanon); Joumana Farah (Holy-Spirit University of Kaslik, Lebanon); Paul Honeine (Université de Technologie de Troyes, France)

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Michelle Cutajar; Edward Gatt; Ivan Grech; Owen Casha (University of Malta, Malta); Joseph Micallef (University of Malta, Malta)

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#### **Asymmetric PAM Model 558**

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#### **Efficient Pico-cell Power Amplifiers 562**

Melin Ngwar; Jim Wight (Carleton University, Canada)

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#### **H.264/AVC 570**

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#### **for Shared Storage Media 574**

Athanasiос Kakarountas (Technological Educational Institute of Ionian Islands, Greece); Epameinontas Hatzidimitriou (University of Patras, Greece); Paris Kitsos (Hellenic Open University, Greece)

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**Friday, 23.05.2014**

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**F3L-A      Special Session: Smart Info-Media Systems**

Time:      **15.40-17.10**

Room:      Aegean Sea

Organizer(s): Yoshikazu Miyanaga (Hokkaido University, Japan)

Chair:      Yoshikazu Miyanaga (Hokkaido University, Japan)

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Akira Taguchi (Tokyo City University, Japan)

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Ryusuke Miyamoto (Meiji University, Japan); Jaehoon Yu; Takao Onoye (Osaka University, Japan)

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Hiroki Iwaizumi; Sugitani Masahiro; Baiko Sai; Hiroshi Tsutsui; Yoshikazu Miyanaga (Hokkaido University, Japan)

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Naoto Sasaoka; Kota Nakamura; Kazushi Otsuki; Yoshio Itoh (Tottori University, Japan); Masaki Kobayashi (Chubu University, Japan)

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Juri Oinuma; Kaoru Arakawa; Hiroshi Harashima (Meiji University, Japan)

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## Friday, 23.05.2014

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### **F3L-B      Special Session: Unconventional Networking Problems**

Time:            15.40-17.10

Room:           Corfu-I

Organizer(s): Edmond A. Jonckheere (University of Southern California, USA)

Chair:           Edmond A. Jonckheere (University of Southern California, USA)

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Pavel Loskot (Swansea University, United Kingdom)

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John Baras (University of Maryland, College Park, USA)

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Sophie Schirmer (Swansea University, United Kingdom); Frank Langbein (Cardiff University, United Kingdom)

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Time:      **15.40-17.10**

Room:      **Corfu-II**

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**F3P      Audio/Speech/Music Processing**

Time: **15.40-17.10**

Room: **Crete**

Chair: **Mohamed Khamadja (University Constantine 1, Algeria)**

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