

SPAWC 2013

The 14th IEEE International Workshop on Signal Processing Advances in Wireless Communications

More details can be found at: www.spawc2013.org/

Contact by email: zoubir@spg.tu-darmstadt.de

Call for Papers

SPAWC 2013, the 14th IEEE International Workshop on Signal Processing Advances for Wireless Communications, will be held in

Darmstadt, Germany from June 16th to 19th 2013

The workshop is devoted to recent advances in signal processing for wireless and mobile communications, information and network theory. The technical program will feature keynote addresses and tutorials by leading researchers, as well as invited and contributed papers.

Important Dates:

Submission deadline:
Notification of acceptance:
Final paper due:

February 4th, 2013
March 29th, 2013
April 10th, 2013

Paper Submission

Prospective authors are invited to submit papers in the following areas:

- Smart antennas, MIMO systems, and space-time coding
- Single-carrier, multi-carrier, and multi-rate systems
- Multiple access and broadcast channels, multi-user receivers
- Fundamental limits on capacity and performance analysis
- Cross-layer issues: from physical to networking and application layers
- Signal processing tools for ad-hoc, multi-hop, and sensor networks
- Cooperative communication, coordinated multipoint transmission and reception
- Cognitive networking
- Cooperative sensing and compressed sensing
- Distributed resource allocation and scheduling
- Ultra-wideband radio and RFID
- Time, frequency, spatial, multi-user diversity in fading channels
- Modeling, estimation and equalization of time-varying channels
- Acquisition, synchronization, and tracking (data aided or blind)
- Signal separation and interference rejection
- Source-channel coding
- Interference alignment
- Low-complexity implementations
- Novel communication modalities and technologies
- Signal Processing for nanonetworks and molecular communication

Up to a four page full paper, including figures, references, and paper classification categories should be submitted via **EDAS**. The paper must contain the name of the authors, affiliation, and contact information, including phone, and email. Comprehensive guidelines for paper preparation and submission can also be found on the paper preparation page.



General Co-Chairs:

Abdelhak M. Zoubir, TU Darmstadt, Germany
Sławomir Stanczak, TU Berlin, Germany

Technical Co-Chairs:

Ali H. Sayed, UCLA, USA
Sergio Barbarossa, Univ. Rome, Italy

Special Session Co-Chairs:

Nikos Sidiropoulos, Univ. of Minnesota, USA
Holger Boche, TU Munich, Germany

Tutorial Session Co-Chairs:

Fulvio Gini, Univ. Pisa, Italy
Anja Klein, TU Darmstadt, Germany

Finance Chair:

M. Pesavento, TU Darmstadt, Germany

Publication Chairs:

R. Cavalcante, HHI, Berlin, Germany
P. Pawelczak, HHI, Berlin, Germany

Organisation Chair:

D. Hildenbrand, TU Darmstadt, Germany

Publicity Chair:

Martin Schubert, TU Berlin, Germany

Technical Program Committee:

Geert Leus
Zhi-Quan (Tom) Luo
Timothy Norman Davidson
Paolo Banelli
Chong-Yung Chi
Shuguang Cui
Huaiyu Dai
Eduard Jorswieck
Erik G. Larsson
Amir Leshem
Geoffrey Ye Li
Roberto Lopez-Valcarce
David J. Love
Xiaoli Ma
Gerald Matz
Matthew R. McKay
Urbashi Mitra
Daniel P. Palomar
Alejandro Ribeiro
Hamid R. Sadjadpour
Akbar M. Sayeed
Gesualdo Scutari
Dirk Stock
Milica Stojanovic
Zhi Tian
Wolfgang Utschick
Sergiy Vorobyov
Zhengdao Wang
Wei Yu
Rui Zhang

2013 IEEE 14th Workshop on Signal Processing Advances in Wireless Communications (SPAWC)



2013 IEEE 14th Workshop on Signal Processing Advances in Wireless Communications (SPAWC) took place 16-19 June 2013 in Darmstadt, Germany.

IEEE catalog number: CFP13AWC-ART
ISBN: 978-1-4673-5577-3

Copyright and Reprint Permission: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Operations Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved. Copyright © 2013 by IEEE.

An Improved ESPRIT-Based Blind CFO Estimation for OFDM in the Presence of I/Q Imbalance

Tzu-Chiao Lin (National Taiwan University, Taiwan); Yen-Chang Pan (National Taiwan University, Taiwan); Wei-Jen Tai (National Taiwan University, Taiwan); See-May Phoong (National Taiwan University, Taiwan)
pp. 639-643

A low-complexity precoding technique for N-continuous OFDM

Yamin Zheng (Zhejiang University, P.R. China); Jie Zhong (Zhejiang University, P.R. China); Minjian Zhao (Zhejiang University, P.R. China); Ming Lei (Zhejiang University, P.R. China)
pp. 644-648

Phase Noise and Carrier Frequency Offset in OFDM systems: Joint Estimation and Hybrid Cramer-Rao Lower Bound

Omar Salim, Omar (University of Southern Queensland & USQ, Australia); Ali A Nasir (Australian National University, Australia); Hani Mehrpouyan (California State University, USA); Wei Xiang (University of Southern Queensland, Australia)
pp. 649-653

KLT-based Estimation of Rapidly Time-Varying Channels in MIMO-OFDM Systems

Pedro Suárez-Casal (University of A Coruña, Spain); José A. García-Naya (University of A Coruña, Spain); Luis Castedo (University of A Coruña, Spain); Markus Rupp (Vienna University of Technology, Austria)
pp. 654-658

S5: Physical layer security

MIMO Gaussian Broadcast Channels with Private and Confidential Messages and with Receiver Side Information

Rafael F. Schaefer (Technische Universität München, Germany); H. Vincent Poor (Princeton University, USA); Holger Boche (Technical University Munich, Germany)
pp. 659-663

Spherical Codes for the Gaussian Wiretap Channel with Continuous Input Alphabets

Joao Almeida (Faculdade de Engenharia da Universidade do Porto & Instituto de Telecomunicações, Portugal); Cristiano Torezzan (State University of Campinas, Brazil); Joao Barros (Instituto de Telecomunicações & Universidade do Porto, Portugal)
pp. 664-668

Experimental Aspects of Secret Key Generation in Indoor Wireless Environments

Alex J Pierrot (Georgia Institute of Technology, USA); Remi A Chou (Georgia Institute of Technology, USA); Matthieu Bloch (Georgia Institute of Technology & Georgia Tech Lorraine, France)
pp. 669-673

Secure Key Agreement Over Reciprocal Fading Channels in the Low SNR Regime

Mattias Andersson (KTH Royal Institute of Technology, Sweden); Ashish Khisti (University of Toronto, Canada); Mikael Skoglund (KTH Royal Institute of Technology, Sweden)
pp. 674-678

Layered Decoding and Secrecy over Degraded Broadcast Channels

Shaofeng Zou (Syracuse University, USA); Yingbin Liang (Syracuse University, USA); Lifeng Lai (Worcester Polytechnic Institute, USA); Shlomo (Shitz) Shamai (The Technion, Israel)
pp. 679-683

Secure Degrees of Freedom on Widely Linear Instantaneous Relay-Assisted Interference Channel

Zuleita Ka Ming Ho (Technical University of Dresden, Germany); Eduard Jorswieck (Dresden University of Technology, Germany)
pp. 684-688