

## IEEE Communications Society Technical Committee on Signal Processing and Communications Electronics Technical Committee (SPCE)

### NEWSLETTER

Issue 3 – May 2018

Dear Signal Processing and Communications Electronics colleagues:

Welcome to the third issue of the SPCE Technical Committee Newsletter. It is conceived as a way to share important information for the members of the committee and to have some brief contact approximately every six months. We would like it to be a useful communication tool so it will be brief and at the same time open for everybody to contribute.

Please feel free to send us any piece of news that you believe can be of interest for our community.

Kindest regards,

Ana Garcia Armada

[anagar@ing.uc3m.es](mailto:anagar@ing.uc3m.es)

SPCE TC Newsletter Editor

#### 1. Contact information

The Officers of the SPCE TC are:

**Chair:**

Octavia A. Dobre  
Memorial University, Canada

**Standards Liaison:**

George C. Alexandropoulos  
Huawei Technologies France

**Vice Chair:**

Xianbin Wang  
Western University

**Newsletter Editor:**

Ana Garcia Armada  
University Carlos III of Madrid, Spain

**Secretary:**

Jingxian Wu  
University of Arkansas

**Student Competition Representative:**

Sinem Coleri Ergen  
Koc Univeristy, Turkey

Please refer to our web page for further information:

<http://spce.committees.comsoc.org/officers/>

## How to join SPCE Committee and mailing list

Membership on the IEEE SPCE TC is open to all members of the IEEE Communications Society who share an interest in signal processing in communications.

To join the SPCE, you simply subscribe to the SPCE mailing list by using the following link:

<https://comsoc-listserv.ieee.org/cgi-bin/wa?SUBED1=spce&A=1>

## **2. Message from the Chair**

Dear Colleagues and Friends,

This is the third issue of the SPCE TC newsletter, which provides information about the exciting activities which our committee is involved in. We hope to further increase the number and type of activities, and for that we rely on your support. Please, contact us with any ideas about new activities.

Thank you for your support of the SPCE TC!

Look forward to seeing you at the SPCE TC meeting at ICC 2018.

Kind regards,

Octavia Dobre

## **3. Committee meetings**

Last SPCE TC meeting was held at IEEE Globecom in Singapore, on December 7 2017. The minutes are available here:

<http://spce.committees.comsoc.org/meeting-reports/globecom-2017/>

Next SPEC TC meeting will be held at IEEE ICC in Kansas City, USA on Tuesday 22 May, 12:00-13:30, room Pershing Place South of hotel Westin Kansas City at Crown Center, with the following agenda:

- Welcome & Introduction
- Technical Presentation: Prof. Geoffrey Y. Lee (Georgia Tech., USA): Historical Note of Signal Processing for Communications
- Approval of Meeting Minutes from GLOBECOM 2017
- Technical Program Committee Reports
- SIG Activity Reports
- SPCE TC Newsletter
- Any Other Business

#### 4. Committee awards

The following two awards are granted on a yearly basis by the SPCE TC:

##### IEEE SPCE Technical Recognition Award

To recognize and encourage continuous and outstanding services to the technical activities sponsored and endorsed by the SPCE Technical Committee.

##### IEEE SPCE Outstanding Service Award

The award recognizes members of the IEEE Communications Society who have made outstanding contributions to the technological advancement of signal processing for communications.

Please find additional information here:

<http://spce.committees.comsoc.org/awards/awards-by-laws-procedures/>

and the list of past recipients:

<http://spce.committees.comsoc.org/awards/awards-by-laws-procedures/>

#### 5. Conferences

##### Flagship conferences

- Next IEEE ICC will be held in Kansas City, 20-24 May 2018.

<http://icc2018.ieee-icc.org/>

SPCE sponsors this conference and appointed the following representatives:

Takahiko Saba (Signal Processing for Communications Co-Chair)

Yonghui Li (Communication Theory Co-chair)

Lian Zhao (Wireless Communications Co-chair)

For the Signal Processing for Communications (SPC) symposium at ICC 2018, 142 papers have been submitted and have been reviewed by 440 TPC members. The number of accepted papers is 54 with 38% acceptance rate.

For the Communication Theory (TC) symposium at ICC 2018, 113 papers have been submitted and have been reviewed by 132 TPC members. The number of accepted papers is 42 with 37% acceptance rate.

For the Wireless Communications (WC) symposium at ICC 2018, 441 papers have been submitted and have been reviewed by 486 TPC members. The number of accepted papers is 175 with 39.7% acceptance rate.

- Next IEEE Globecom will be held in Abu Dhabi, 9-13 December 2018

<http://globecom2018.ieee-globecom.org/>

SPCE sponsors this conference and appointed the following representatives:

Caijun Zhong (Signal Processing for Communications Co-Chair)

For the Signal Processing for Communications (SPC) symposium at Globecom 2018, 160 papers have been submitted and will be reviewed by 162 TPC members.

#### Other related conferences/special issues

SPCE sponsors the following conferences:

- 25th International Conference on Telecommunication (ICT 2018)  
(Saint-Malo, France, June 2018)  
SPCE representatives:
  - Octavia Dobre, Memorial University of Newfoundland, Canada
  - Ana Garcia Armada, Universidad Carlos III de Madrid, Spain
  - Markku Juntti, University of Oulu, Finland

<http://ict-2018.org/>
- International Conference on Computational Science (ICCS 2018)  
(Wuxi, China, June 2018)  
SPCE representatives:
  - Sumei Sun, Institute for Infocomm Research, Singapore
  - Chau Yuen, Singapore University of Technology and Design, Singapore
  - Wei Zhang, University of New South Wales, Australia

<https://www.iccs-meeting.org/iccs2018/>
- 9th Advanced Satellite Multimedia Systems Conference and the 15th Signal Processing for Space Communications Workshop (ASMS/SPSC 2018)  
(Berlin, Germany, September 2018)  
SPCE representatives:
  - Yahia Eldemerdash, Memorial University of Newfoundland, Canada
  - Ebrahim Bedeer, Ulster University, Northern Ireland
  - Tomaso de Cola, German Aerospace Center, Germany

[https://www.aconf.org/conf\\_157561.html](https://www.aconf.org/conf_157561.html)
- 5th IEEE/ACM International Conference on Nanoscale Computing and Communication (NanoCom 2018)  
(Reykjavik, Iceland, September 2018)  
SPCE representatives:
  - Markku Juntti, University of Oulu, Finland
  - Robert Schober, University of Erlangen, Germany
  - Marcello Caleffi, University of Naples Federico II, Italy

<https://nanocom.acm.org/nanocom2018/>
- The Tenth International Conference on Wireless Communications and Signal Processing (WCSP 2018)

(Hangzhou, China October 2018)

SPCE representatives:

- Lajos Hanzo, University of Southampton
- Jingxian Wu, University of Arkansas
- Shaodan Ma, University of Macau

<http://www.ic-wcsp.org/>

- 12th International Conference on Signal Processing and Communication Systems (ICSPCS 2018)

(Cairns, Australia, December 2018)

SPCE representatives:

- Octavia Dobre, Memorial University of Newfoundland, Canada
- Jinhong Yuan, University of New South Wales, Australia
- Takahiko Saba, Chiba Institute of Technology, Japan

[http://www.dspcs-witsp.com/icspcs\\_2018/index.html](http://www.dspcs-witsp.com/icspcs_2018/index.html)

- International Conference on Computing, Networking and Communications (ICNC 2019)  
(Honolulu, Hawaii, USA, February 2019)

SPCE representatives:

- Stefano Basagni, Northeastern University
- Ebrahim Bedeer, Ulster University, Northern Ireland
- Hsiao-Chun Wu, Louisiana State University, USA

<http://www.conf-icnc.org/2019/>

- IEEE International Conference on Wireless for Space and Extreme Environments (WiSEE 2019)

(Ottawa, Canada, October 2019)

SPCE representatives:

- Marco Chiani, University of Bologna, Italy
- Rui Dinis, University Nova de Lisboa, Portugal
- Xu Zhu, University of Liverpool, UK
- Yik-Chung Wu, The University of Hong Kong, Hong Kong

<http://sites.ieee.org/wisee-2019/>

## 6. Standardization activities

SPCE TC welcomes its members to become part of the IEEE standard activities. It also welcomes all volunteers from standardization groups to participate to the SPCE TC activities.

Updates on the three Technical Specification Groups (TSG) and their Working Groups (WGs) in [3rd Generation Partnership Project \(3GPP\)](#) are available online:

- [Radio Access Networks \(RAN\)](#): Next meeting information and previous meeting reports and documents are available [here](#).
- [Services & Systems Aspects \(SA\)](#): Next meeting information and previous meeting reports and documents are available [here](#).
- [Core Network & Terminals \(CT\)](#): Next meeting information and previous meeting reports and documents are available [here](#).

IEEE Virtual Reality and Augmented Reality Working Group:

- [IEEE P2048.1™ – Device Taxonomy and Definitions](#)
- [IEEE P2048.2™ – Immersive Video Taxonomy and Quality Metrics](#)
- [IEEE P2048.3™ – Immersive Video File and Stream Formats](#)
- [IEEE P2048.4™ – Person Identity](#)
- [IEEE P2048.5™ – Environment Safety](#)

IEEE DySPAN Standards Committee (DySPAN-SC):

IEEE 1900.1 Working group: <http://grouper.ieee.org/groups/dyspan/1/index.htm>

**NEWS**–Call for Interest in Participation in IEEE 1900.1 Revision  
SPCE representatives: G. Giunta, F. Benedetto, and M. Mayor.

IEEE 1900.4 Working group: <http://grouper.ieee.org/groups/dyspan/4/index.htm>

IEEE 1900.5 Working group: <http://grouper.ieee.org/groups/dyspan/5/index.htm>

IEEE 1900.6 Working group: <http://grouper.ieee.org/groups/dyspan/6/index.htm>

IEEE 1900.7 Working group: <http://grouper.ieee.org/groups/dyspan/7/index.htm>

SPCE representative: Muhammad Z. Shakir

IEEE 802 Standard:

IEEE 802.1 Working group: <http://grouper.ieee.org/groups/802/1/index.html>

IEEE 802.2 Working group: <http://grouper.ieee.org/groups/802/2/index.html>

IEEE 802.3 Working group: <http://grouper.ieee.org/groups/802/3/index.html>

IEEE 802.5 Working group: <http://www.ieee802.org/5/www8025org/>

IEEE 802.11 Working group: <http://grouper.ieee.org/groups/802/11/index.html>

IEEE 802.12 Working group: <http://grouper.ieee.org/groups/802/12/index.html>

IEEE 802.15 Working group: <http://grouper.ieee.org/groups/802/15/>

IEEE 802.16 Working group: <http://grouper.ieee.org/groups/802/16/index.html>

IEEE 802.17 Working group: <http://grouper.ieee.org/groups/802/17/>

IEEE 802.18 Working group: <http://grouper.ieee.org/groups/802/18/>

IEEE 802.19 Working group: <http://grouper.ieee.org/groups/802/19/>

IEEE 802.20 Working group: <http://grouper.ieee.org/groups/802/20/>

IEEE 802.21 Working group: <http://www.ieee802.org/21/index.html>

IEEE 802.22 Working group: <http://www.ieee802.org/22/>

[Latest IEEE-SA Standards Board Approvals](#)

[IEEE-SA Newswire March 2018 Issue](#)

**Special Interest Groups activities**

## SIG on Signal processing techniques in 5G communication systems

The SIG has worked in the following activities:

- IEEE JSAC special issue on mmWave, June and July of 2017.
- IEEE Transactions on Multimedia, Special Issue on Video over Future Networks: Emerging Technologies, Infrastructures, and Applications, Oct. 2017.
- IEEE Access Journal, Special Issue on Cooperative and Intelligent Sensing, Dec. 2017.
- IEEE Wireless Communications, special issue on NOMA, Apr 2018.
- IEEE Access, special issue on The Internet of Energy: Architectures, Cyber Security, and Applications.
- IEEE Wireless Communications Magazine, special issue on Wireless Big Data: Technologies and Applications.
- IEEE Access, special issue on Deployment and Management of Small Heterogeneous Cells for 5G.
- IEEE Journal of Selected Topics in Signal Processing, special issue on hybrid precoding, to appear.
- IEEE/CIC China Communications Journal, Special Issue on Quality of Experience for multimedia communications, to appear.
- ACM/Springer Mobile Networks and Applications (MONET) Journal, Special Issue on Future wireless Internet technology and its applications, to appear.

More information about the SIGs may be found in our web page:

<http://spce.committees.comsoc.org/special-interest-groups/>