



Board on International Scientific Organizations

U.S. National Committee for the
International Union of Radio Science

National Academy of Sciences

International Union of Radio Science U.S. Commission B

J. Simpson, Chair
B. Notaros, Vice-Chair
R. Baktur, Secretary

Please reply to:

Reyhan Baktur
Dept. of ECE, Utah State Univ.
EL 150, 4120 Old Main Hill
Logan, UT 84322

phone: (435) 797-2955

fax: (435) 797-3054

e-mail: reyhan.baktur@usu.edu

MINUTES Commission B Business meeting

2019 USNC-URSI
National Radio Science Meeting
Boulder, CO, USA
January 10, 2019

1. Chair Jamesina Simpson called meeting to order at 5:00 p.m.
2. Chair welcomed members and guests.
3. The Secretary handed out attendance signup sheets.
4. Introduction of guests.
5. Motioned, seconded, and voted to approve the minutes from the 2018 USNC-URSI Radio Science Meeting in Boston. Minutes approved.
6. **Chair Report**— Review of USNC-URSI Commission B officers, USNC-URSI officers.
7. **Chair Report**— Discussion Items:
 - (1) This year USNC-URSI provided an advance download of NRSN abstracts and summaries. Please provide feedback.
 - Feedbacks: Yes for download.
 - (2) Now that the USB contents are available for download, is there any interest in still getting the USB drive with registration? USNC-URSI would save money if those are no longer provided.
 - Branislav Notaros said the funds could be used for other things. A student said it was useful to have for looking up the abstracts.
 - Kubilay Sertel asked if the abstracts would be online. Ross Stone answered “we are in the process of putting them online.” Ross Stone suggested that it could be

done as in the last year. They could be posted as a zip file that one would be able to download.

- Gary Brown asked if the process will be handled the same way when our Canadian colleagues join us for the 2020 NARSM, and he suggested that we should ask. Ross Stone replied “we have not heard any objection, but should ask”. The online archive is open to everybody.
- (3) Will your commission participate in the 2021 Singapore and 2022 Denver summer meetings with AP-S?
- Piergiorgio Uslenghi moved it for discussion; it was then seconded, voted, and passed. Yes, we will participate.
- (4) Is there interest in using a conference app instead of the traditional printed program (one or the other, not both) for future NRSMs?
- One student said he wanted to have paper version.
 - Piergiorgio Uslenghi wanted to keep a printed version.
 - Jamesina Simpson asked if we could save money by choosing one method over another.
 - Micheal Newkirk said that an App might be an easier way to do it, as lots of work goes into the paper method.
 - Yahya Rahmat-Samii said that on paper, one could mark the papers he/she likes.
 - Ross Stone commented that it really depends on the App.
 - Branislav Notaros said that the PDF version was good and should at least have PDFs.
 - Satish Sharma asked how about keeping both for a number of years and then decide?
 - Jamesina Simpson asked how the App had been working for the AP-S Symposium.
 - Answers: Not so good. They do not have one single PDF.
 - Micheal Newkirk pointed out that we do not know how much it costs to print the program booklet for the NRSM in Boulder. Once we have an estimate, we can then compare it with the expense of the App.
 - Sembiam Rengarajan asked how many people do not have smart phones, these days. He pointed out that one idea could be to give attendees a PDF file and let them decide if they would like to print it.
- (5) USNC-URSI currently has only one award (Booker Fellowship) given every three years. Does your Commission have any suggestions for USNC-URSI to institute annual awards?
- Branislav Notaros said “Why not?”.
 - Jamesina Simpson asked if we should do award ceremonies.

- Sembiam Rengarajan said we do not have to do ceremonies, and the award could be given at the plenary session.
 - Sembiam commented that it would be more of a recognition and money is not so important.
 - Yahya Rahmat-Samii asked how we should do it and how to determine this.
 - Sembiam Rengarajan said maybe we should discuss it with the executive committee.
 - John Volakis asked if the award would be every three years and international. If it would be international, then we would have to share the awards. We should have our own awards. One junior, one mid-career, and one senior award.
 - Branislav Notaros commented that the award could be research contribution or service to USNC-URSI.
 - John Volakis commented that we have so many great people, and we should not worry about running out of people to nominate.
 - Branislav Notaros commented that we should not distinguish or separate between contribution and service.
 - David Jackson commented that these awards would parallel the AP-S awards, which are given annually.
 - Jamesina Simpson said that an award committee could be formed, and we could rotate the committee members.
- (6) USNC-URSI has formed an exploratory committee to develop recommendations for short courses, tutorials and/or workshops at the NRSMs. Is anyone interested in participating on the committee, being a presenter, or have ideas for topics?
- Piergiorgio Uslenghi said that it should not be in parallel with or together with regular sessions. Time constraints would be an issue.
 - Sembiam Rengarajan suggested the possibility of making it online and it could then be held at any time during the year.
 - Yahya Rahmat-Samii cautioned that we should be careful as most participants are students and most students would come late on Tuesday and leave by Friday. He suggested that we should survey students.
 - Jamesina Simpson asked the students attending the business meeting if they would be interested. The responses were yes and preferably online.
 - Jamesina Simpson invited members to participate and asked whoever was interested in participating on the committee to email her.
- (7) USNC-URSI is considering the formation of a Social Media Committee to help publicize NRSM topics, events, awards and announcements (through Twitter, for example). Is there any interest in participation?

- Ryan Greed said he had been thinking about it for the last few years. Lots of students use YouTube. But we have little exposure on this platform.
 - Jamesina Simpson commented that it looked like there was some interest.
 - Ross Stone said “If you want to do something, let me know”.
- (8) USNC-URSI would like to form a Chapter of Women in Radio Science. Please provide contact information for those interested in serving as officers of the Chapter.
- Jamesina Simpson said, “If you are interested, or if you know someone who is interested, please let me know.”
 - Sembiam Rengarajan asked members if anyone was interested.
 - Piergiorgio Uslenghi suggested to Jamesina Simpson that, since there are many prominent women already involved in USNC-URSI, women should come together and decide on the Chapter formation.
 - Piergiorgio Uslenghi continued with, “This will be the first WIRS National Chapter, and I intend to propose it to the international URSI board.”
- (9) Please provide Plenary Session topic ideas for NRSM 2021.
- Yahya Rahmat-Samii said that so far in every NRSM the plenary session were jointly hosted by two USNC-URSI committees. He suggested that maybe it can be made more broad for the 2021 session, as he suggested during the USNC-URSI Business Meeting on Tuesday.
- (10) USNC-URSI is considering a reduced registration rate for post-doctoral attendees. Does your commission support this idea?
- Piergiorgio Uslenghi argued that giving reduced fees may encourage them to continue attending.
 - Ross Stone suggested that instead of labeling it to postdocs, maybe mark it as new graduates.
 - Yahya Rahmat-Samii suggested putting a time limit, such as 5 year after receiving the doctoral degree.

8. **Slides from Ross Stone** (slides attached at the end of the minutes)

(1) Radio Science Bulletin, Radio Science Letters

- Jamesina Simpson asked when the new journal *Radio Science Letters* would start, and Ross Stone replied that it would be the next month or so.
- Jamesina Simpson commented that it would be peer reviewed.

(2) Upcoming Meetings

- Ross Stone said if anyone has a session to propose for the 2020 GASS, please propose in the next few months.

- John Volakis said to let him know if anyone wanted to contribute to the memorial session at the 2020 GASS in honor of Prof. Thomas B. A. Senior.
- (3) Individual Memberships. The link is provided in the slides.
- (4) Other upcoming meetings.
- Ross Stone corrected a paper deadline.
 - Jamesina Simpson commented that those would be all online and one can look them up.
 - John Volakis reminded everyone that there were couple of conferences he was going to chair in Miami, and they were still accepting papers.

9. Technical Activities Report

- This year we have statistics for summaries and abstracts at the NRSM.
- Sembiam Rengarajan suggested that we should discuss the reason why we had a drop in numbers, even after extending the deadline. Was the conference date a reason?
 - The answers from the floor was yes, because most schools had started that week.
- Reyhan Baktur commented that Branislav Notaros practiced aggressive recruiting one year for the special and general sessions and that was a great success.
 - Attendees in the room agreed that such a practice was effective.
- Piergiorgio Uslenghi said maybe it would be a good idea to co-organize sessions with our Canadian colleagues for the 2020 NARSM in Montreal. There was already a special committee proposing this, but it might be different from USNC-URSI.
- Michael Newkirk commented that the process for organizing special sessions at the NARSM would be different than what we do at the NRSM, but members of USNC-URSI Commissions could still propose to organize special sessions. (At the RSMs and NARSMs, a special committee (the AP-S New Technology Directions Committee, chaired by Eric Mokole) is used to decide on the selection of special sessions.)

10. Committee Report -- Membership Committee

- Kathy Melde has to resign, so we need a new member for this committee.
- There are three nominees this year, two for Member and one for Associate Member.
- Gary Brown asked for the affiliation of the first candidate, and Steven Weiss said he would add it.
- Moved to vote, seconded, voted to approve, and all nominees were approved.

11. Chair Report-- Old Business

None.

12. Chair Report-- New Business

Yes, David Jackson introduced a guest that was missed at the beginning of the meeting.

13. Meeting adjourned.

Respectfully submitted by Reyhan Baktur, Secretary.

Guests attended

Michael Newkirk, Dave Barker, Robert McKay, Ifana Mahbub, Ryan Green, Edwin Rebollo, George Lee, Chaoxian Qi, Bashir Morshed, Jordan Budhu, Anastasios Papathanasopoulos, Cody Scarborough, ghanshyam Mishra, Sam Gaxiola, UtSav Poudel, Seckin Sahin, John Neese.

Members attended

Gary Brown, Danilo Erricolo, David Jackson, Roger H. Lang, Yang Li, Branislav Notaros, Marco David Poort, Yahya Rahmat-Samii, Sembiam Rengarajan, Kubilay Sertel, Erdem Topsakal, Steven Weiss, Donald Wilton, Nader Behdad, Majid Manteghi, Eric Mokole, Satish Sharma, Jamesina Simpson, Reyhan Baktur, Piergiorgio Uslenghi, John Volakis.

USNC-URSI Commission-B Business Meeting

Thursday, 10 January 2019
5:00 – 6:00 p.m.

2019 USNC-URSI National Radio Science Meeting
Boulder, CO
January 9-12, 2019



- Welcome to members and guests
- Approval of the minutes of the Boston meeting, July 2018
- CHAIR REPORT
- COMMITTEE REPORTS
 - Technical Activities Report (Satish Sharma)
 - Membership Committee (Steven Weiss)
- Old business
- New business
- Adjourn



USNC-URSI Commission B Officers 2018-2021

Chair: Jamesina Simpson (University of Utah)

Vice-Chair: Branislav Notaros (Colorado State University)

Secretary: Reyhan Baktur (Utah State University)

Chair, TAC: Satish Sharma (San Diego State University)

Chair, Membership Committee: Steven Weiss (ARL)

Webmaster: Chelsea Bock at National Academies (cbock@nas.edu)

http://sites.nationalacademies.org/pga/biso/URSI/PGA_080674



USNC-URSI Officers 2018-2021

Chair: Sembiam Rengarajan (California State University – Northridge)

Past-Chair: David Jackson (University of Houston)

Secretary and Chair-Elect: Michael Newkirk (Johns Hopkins APL)

Accounts Manager: Gary Brown (Virginia Polytechnic Institute and State University)



Discussion Items

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Discussion Items

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Discussion Items

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- 9) Please provide Plenary Session topic ideas for NRSM 2021
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Commission-B
Business Meeting

Chair Report



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Slides from Ross Stone

Commission-B
Business Meeting

Committee Report



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Technical Activities Report: Satish Sharma

Commission-B
Business Meeting

Committee Report



Board on International Scientific Organizations

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Membership Committee: Steven Weiss



- ❖ Old Business?
- ❖ New Business?
- ❖ Adjourn

Radio Science Bulletin (RSB)

- **Since the Montreal GASS, the *RSB* has been running late**
- **It is now back on schedule**
- **We are actively soliciting papers**
 - **Of broader interest (understandable by those from other Commissions)**
 - **Tutorial and review papers also welcome**
- **Available as an open-access publication on IEEE Xplore, with no article processing charges**

URSI *Radio Science Letters*

- **URSI is launching a new open-access publication**
- **Rapid-publication letters journal, covering the scope of the 10 Commissions of URSI**
- **Four-page maximum paper length**
- **Electronic only publication**

URSI *Radio Science Letters*

- **Accept, accept with minor revision, reject with encouragement to resubmit, reject**
- **\$150/page (URSI member; \$175/page non-member) article processing fee**
- **Fully edited**
- **George Uslenghi is the founding Editor-in-Chief**

XXXIIIrd URSI GASS



- **August 29-September 5, 2020, La Sapienza University, Rome, Italy**
- **Venue chosen because of central location in Rome, lower cost for use of venue**
- **Rooms are air conditioned**
- **Spread over three floors, substantial distances between some rooms**

XXXIIIrd URSI GASS

- **Poster sessions outside in (air conditioned?) tents**
- **Lunch also probably in tents**
- **Important:** Commission sessions will be finalized at the AP-RASC 2019 March 9-15, 2019, New Delhi
 - **Contact international Commission Chair in next few weeks if you want to propose a session**

Future GASS

- **2023: Sapporo Convention Center, Sapporo, Japan, most probably in August 2023**

AP-RASC 2019

- **AP-RASC 2019: March 9-15, 2019, India Habitat Centre, New Delhi, India**
- **If you are planning to attend, apply for your visa *now!***
 - It took me >1 month to get a visa
- **Strongly suggest making hotel reservation now: Recommend Taj Ambassador Vivanta if available**

Individual Membership in URSI

- **Individual Members and Associate Members by application through www.ursi.org**
 - Requirements similar to USNC membership
 - Benefits: recognition, registration discounts at URSI meetings starting with AT-RASC 2018, and at some URSI cosponsored conferences (e.g., some IEEE conferences)
 - Notification of *RSB*
 - Reduced page charges in *RSL*
- **USNC-URSI Commission members will be automatically endorsed by USNC**
- **Urge your Commission members to join!**

Upcoming Meetings: Joint Symposia

- July 7-12, 2019, Atlanta, GA, John Papapolymmerou
Paper submission: January 15, 2019
www.2019apsursi.org
- July 19-24, 2020, Montreal, Canada, Ahmed Kishk
Note: no NRSM in 2020; NARSM in Montreal
- July 10-16, 2021, Singapore
Zhi Ning Chen, General Chair
Zhongxiang Shen and Xianming Qing, Co-Chairs
- July 10-15, 2022, Denver, Colorado, Branislav
Notaros

AP-RASC 2019

- **Asia-Pacific Radio Science Conference**
- **March 9-15, 2019**
- **India Habitat Centre, New Delhi, India**
- **If you are planning to attend, apply for your visa *now!***
 - It took me >1 month to get a visa
- **Strongly suggest making hotel reservation now:
Recommend Taj Ambassador Vivanta if available**

EMTS 2019

- **URSI Commission B EM Theory Symposium**
- **May 28-31, 2019**
- **Westin San Diego**

Other Future URSI Meetings

- **URSI GASS 2020: August 29 – September 5, 2020
Sapienza University, Rome, Italy**
- **URSI AT-RASC 2021: May 23-28, 2021, Gran
Canaria, Spain**
- **URSI GASS 2023: Sapporo Convention Center,
Sapporo, Japan, most probably in August 2023**

Other Meetings of Interest

- **March 31-April 5, 2019: European Conf. on Antennas and Propagation (EuCAP), Krakow, Poland**
- **July 28-August 2, 2019: IEEE Geoscience and Remote Sensing Symposium (IGARSS), Yokohama, Japan**
- **September 9-13, 2019: International Conference on EM in Advanced Applications (ICEAA)/ IEEE-AP-S Conference on Antennas and Propagation in Wireless Communications, Granada, Spain (March 8, 2019)**

Other Meetings of Interest

- **October 27-30, 2019: International Symposium on Antennas and Propagation (ISAP), Xi'an, China (June 10, 2019)**
- **November 4-7, 2019: 8th IEEE International Symposium on Microwave, Antenna, Propagation, and EMC Technologies (MAPE 2019) (July 31, 2019)**
- **November 4-8, 2019: 4th Symposium of the Committee on Space Research (COSPAR), Herzliya, Israel (April 30, 2019)**



2019 USNC-URSI National Radio Science Meeting
January 9-12, 2019
University of Colorado at Boulder

URSI Commission-B Technical Activities Report

**10 January 2019
Boulder**

**Satish K. Sharma
San Diego State University**

2019 National Radio Science Meeting

Conference Statistics

Total number of pre-registrants: 321

Total abstracts and summaries submitted: 342

Total abstracts and summaries accepted: 341

Abstracts: 283 and Summaries: 58

Number of sessions: 46

Total number of Student Travel Grant Award applications: 109

	2019	2018	2017	2016	2014	2013	2012
Total No. of papers	342	414	421	375	399	364	369
Total No. of sessions	46	59	56	49	54	47	47
Total No. of travel grants	109	128	137	122	115	100	104

National Radio Science Meeting

Conference Statistics

Year	# Papers	# Sessions	# Travel Grants
2011	358	49	113
2012	369	47	104
2013	364	47	100
2014	399	54	115
2015	NARSM	NARSM	NARSM
2016	375	49	122
2017	425	56	137
2018	414	59	128
2019	341	46	109

- In 2019, one page abstracts: 283 and two page summaries: 58
- In 2018, one page abstracts: 356 and two page summaries: 61

2017 and 2018 National Radio Science Meeting Conference Statistics

2017		2018		2019	
Country	Papers		Papers		Papers
United States	404	United States	390	United States	321
Canada	6	Canada	9	Canada	16
South Africa	4	Taiwan	3	South Africa	2
Kuwait	3	Russian Federation	2	Spain	1
?	2	Czech Republic	2	Australia	1
Japan	1	Japan	2		
France	1	France	2		
China	1	Turkey, South Korea, Nigeria, India, China (1 each)	5		
Brazil	1				
Australia	1				
Total	424	Total	416	Total	341

2017: About 5% of the papers (20 papers) have come from outside the U.S.

2018: About 6% of the papers (25 papers) have come from outside the U.S.

2019: About 6% of the papers (20 papers) have come from outside the U.S.

Commission B Special Sessions, 2019 USNC-URSI NRSM, Boulder, Colorado

4 B special sessions: 35 papers, 7 B regular sessions: 55 papers (total URSI: **46** sessions, **341** papers)

Special Session Title	No. of Papers	Organizers
1. 5G and Massive MIMO Antennas and Systems (CANCELLED)	0	Shubhendu Bhardwaj, Florida Int. Univ., and Ghanshyam Mishra, San Diego State University
2. Astronomical Phased Arrays: From Theory to Practice (Commission B/J) (CANCELLED)	0	Karl Warnick, BYU and Juming Diao, UCLA
3. Metamaterials and Metasurfaces: Theory & Applications	10	Filippo Capolino, UC Irvine & Ashwin Iyer, Univ. of Alberta
4. Wearable, Implants, and Body-Area Networks (B/K)	10	Bashir Morshed, Univ. of Memphis & Ryan Green, Virginia Commonwealth University
5. Antennas for Specialized Platforms: SmallSats, UAVs, and UUVs	5	Reyhan Baktur, Utah State, & David Jackson, Univ. of Houston
6. Techniques for Modeling of Waves in Plasmas (BGH) (CANCELLED)	0	Robert Marshall, Robert Lysak, Mark Golkowski, Vijay Harid
7. Low-Profile Antennas from Gigahertz to Terahertz	10	Goutam Chattopadhyay, JPL-NASA and Satish K. Sharma, San Diego State University

Commission B Special Sessions, 2018 USNC-URSI NRSM, Boulder, Colorado

10 B special sessions, **70** papers, **8** B regular sessions, **51** papers (total URSI: **59** sessions, **414** papers)

Special Session Title	No. of Papers	Organizers
1. Millimeter-Wave and 5G Antennas and Systems	6	Shubhendu Bhardwaj, Florida Int. Univ., & Joshua Kovitz, Georgia Tech
2. Nonmagnetic and Nonreciprocal Devices	7	Ethan Wang, UCLA, & Andrea Alu, Univ. of Texas
3. Advances in Computational Electromagnetics on Modern Computers	5	Ali Yilmaz, Univ. of Texas, & Zhen Peng, Univ. of New Mexico
4. Emerging Applications of Phased Arrays	7	Karl Warnick, BYU, & Elias Alwan, Florida Int. Univ.
5. Adv. Theory & Applications of Metamaterials	9	Filippo Capolino, UC Irvine, & Ashwin Iyer, Univ. of Alberta
6. Adv. Analysis, Design, & Appl. of WG Structures	10	Michael Havrilla, Air Force Ins of Tech, & Edward Rothwell, Michigan State
7. Wearable Antennas and Electronics	7	Asimina Kiourti, Ohio State, & Bashir Morshed, Univ. of Memphis
8. Antennas for Specialized Platforms: SmallSats, UAVs, and UUVs	5	Reyhan Baktur, Utah State, & David Jackson, Univ. of Houston
9. 3D Printed Antennas	9	Hao Xin, Univ. of Arizona, & Jacob Adams, North Carolina State
10. Techniques for Modeling of Waves in Plasmas (BGH)	5	Robert Marshall, Robert Lysak, Mark Golkowski

Commission B Regular Sessions, 2017 USNC-URSI NRSM, Boulder, Colorado

8 B special sessions: **63** papers, **10** B regular sessions: **75** papers (total URSI: **56** sessions, **421** papers)

Regular Session Title	No. of Papers	Chairs
1. B3: Antennas	10	Dejan Filipovic, University of Colorado Boulder; Karl Warnick, Brigham Young University
2. B4: Scattering	5	Alex Yuffa, National Institute of Standards and Technology; Piergiorgio Uslenghi, University of Illinois at Chicago
3. B5: Liquid Metal Antennas	5	Jacob Adams, North Carolina State University; William Davis, Virginia Tech
4. B6: Complex Media and Nanoelectromagnetics	10	Edward Kuester, University of Colorado Boulder; Christos Argyropoulos, University of Nebraska-Lincoln
5. B8: Inverse Scattering and Remote Sensing	5	Piergiorgio Uslenghi, University of Illinois at Chicago; Pai-Yen Chen, University of Texas at Austin
6. B9: Antenna Arrays I	9	Randy Haupt, Colorado School of Mines; Dejan Filipovic, University of Colorado Boulder
7. B13: Antenna Measurements and Simulations	8	Steven Weiss, US Army Research Lab; Jeanne Quimby, NIST
8. B14: Antenna Arrays II	8	Dejan Filipovic, University of Colorado Boulder; Gokhan Mumcu, University of South Florida
9. B16: Microstrip Antennas and Printed Devices	9	Erdem Topsakal, Virginia Commonwealth University; Ozlem Kilic, The Catholic University of America
10. B17: Numerical Methods	6	Atef Elsherbeni, Colorado School of Mines; Melinda Piket-May, University of Colorado

Special Sessions for National Radio Science Meeting 2021

- Please contact Satish K. Sharma by April 2019 at the latest if you are interested in organizing special session for the next NRSM 2021.
- We do need more special sessions on topics of interest.
- Email: ssharma@sdsu.edu

Borrowed from
Dr. Branislav M.
Notaros's slides



2018 IEEE International Symposium on Antennas and Propagation/USNC-URSI National
Radio Science meeting, July 8–13, 2018, **Boston**, MA

Papers submitted, accepted, rejected, and withdrawn

(Breakdown: AP, URSI, URSI from US authors, URSI from non-US authors)

Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 1830	Total Accepted: 1708	Total Rejected: 74	Total Withdrawn: 60
- AP Submitted: 1422	- AP Accepted: 1312	- AP Rejected: 72	- AP Withdrawn: 38
- URSI Submitted: 408	- URSI Accepted: 396	- URSI Rejected: 1	- URSI Withdrawn: 11
- URSI from US: 214	- URSI from US: 210	- URSI From US: 1	- URSI from US: 03
- URSI from non-US: 194	- URSI from non-US: 186	- URSI From non-US: 0	- URSI from non-US: 08

2017 IEEE International Symposium on Antennas and Propagation/USNC-URSI National
Radio Science meeting, July 9–14, 2017, **San Diego**, California

Papers submitted, accepted, rejected, and withdrawn

(Breakdown: AP, URSI, URSI from US authors, URSI from non-US authors)

Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 1946	Total Accepted: 1792	Total Rejected: 67	Total Withdrawn: 87
- AP Submitted: 1507	- AP Accepted: 1380	- AP Rejected: 67	- AP Withdrawn: 60
- URSI Submitted: 438	- URSI Accepted: 412	- URSI Rejected: 0	- URSI Withdrawn: 27
- URSI from US: 254	- URSI from US: 240	- URSI From US: 0	- URSI from US: 14
- URSI from non-US: 184	- URSI from non-US: 172	- URSI From non-US: 0	- URSI from non-US: 13

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2016 IEEE International Symposium on Antennas and Propagation/USNC-URSI National
Radio Science meeting, June 26 - July 1, 2016, Fajardo, **Puerto Rico**

Papers submitted, accepted, rejected, and withdrawn

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Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 1620	Total Accepted: 1458	Total Rejected: 77	Total Withdrawn: 76
- AP Submitted: 1218	- AP Accepted: 1100	- AP Rejected: 67	- AP Withdrawn: 45
- URSI Submitted: 402	- URSI Accepted: 358	- URSI Rejected: 10	- URSI Withdrawn: 31
- URSI from US: 233	- URSI from US: 217	- URSI From US: 1	- URSI from US: 8
- URSI from non-US: 169	- URSI from non-US: 141	- URSI From non-US: 9	- URSI from non-US: 23

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Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 1830	Total Accepted: 1708	Total Rejected: 74	Total Withdrawn: 60
- AP Submitted: 1422	- AP Accepted: 1312	- AP Rejected: 72	- AP Withdrawn: 38
- URSI Submitted: 408	- URSI Accepted: 396	- URSI Rejected: 1	- URSI Withdrawn: 11
- URSI from US: 214	- URSI from US: 210	- URSI From US: 1	- URSI from US: 03
- URSI from non-US: 194	- URSI from non-US: 186	- URSI From non-US: 0	- URSI from non-US: 08

2015 IEEE AP-S Int. Symposium & North American URSI Mtg., **Vancouver**, BC, Canada

Papers submitted, accepted, rejected, and withdrawn

(Breakdown: AP, URSI, URSI from US authors, URSI from Canadian authors)

Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 1974	Total Accepted: 1867	Total Rejected: 105	Total Withdrawn: 31
- AP Submitted: 1392	- AP Accepted: 1301	- AP Rejected: 89	- AP Withdrawn: 24
- URSI Submitted: 572	- URSI Accepted: 549	- URSI Rejected: 16	- URSI Withdrawn: 7
- URSI From US: 328	- URSI from US: 322	- URSI From US: 6	- URSI from US: 6
- URSI From Canada: 56	- URSI from Canada: 56	- URSI From Canada: 0	- URSI from Canada: 0

2018 IEEE AP-S International Symposium & USNC-URSI Meeting, **Boston**, MA

URSI	Submitted Papers	Accepted Papers	Withdrawn Papers	Sessions
A	27	27	0	4
B	226	216	6	29
C	25	25	0	3
D	0	0	0	0
E	13	13	0	2
F	41	39	2	4
G	4	4	0	1
J	0	0	0	0
K	22	20	2	3
URSI Special	53	52	1	0
Total	411	396	11	46

2017 IEEE AP-S International Symposium & USNC-URSI Meeting, **San Diego**, California

URSI	Submitted Papers	Accepted Papers	Withdrawn Papers	Sessions
A	34	32	2	4
B	233	224	9	34
C	20	16	4	3
D	10	6	4	1
E	10	9	1	1
F	54	52	2	7
G	0	0	0	0
J	0	0	0	1
K	23	20	3	3
URSI Special	54	52	2	0
Total	438	411	27	54

2018 IEEE AP-S International Symposium & USNC-URSI Meeting, **Boston**, MA

URSI	Submitted Papers	Accepted Papers	Withdrawn Papers	Sessions
A	27	27	0	4
B	226	216	6	29
C	25	25	0	3
D	0	0	0	0
E	13	13	0	2
F	41	39	2	4
G	4	4	0	1
J	0	0	0	0
K	22	20	2	3
URSI Special	53	52	1	0
Total	411	396	11	46

2016 IEEE AP-S International Symposium & USNC-URSI Meeting, Fajardo, **Puerto Rico**

URSI	Submitted Papers	Accepted Papers	Sessions
A	29	23	3
B	217	195	27
C	19	17	3
D	7	7	1
E	7	7	1
F	48	38	6
G	0	0	0
J	2	2	1
K	15	14	3
URSI Special	58	55	0
Total	402	358	64

2018 IEEE AP-S International Symposium & USNC-URSI Meeting, **Boston**, MA

URSI	Submitted Papers	Accepted Papers	Withdrawn Papers	Sessions
A	27	27	0	4
B	226	216	6	29
C	25	25	0	3
D	0	0	0	0
E	13	13	0	2
F	41	39	2	4
G	4	4	0	1
J	0	0	0	0
K	22	20	2	3
URSI Special	53	52	1	0
Total	411	396	11	46

2015 IEEE AP-S Int. Symposium & North American URSI Mtg., **Vancouver**, BC, Canada

URSI	Submitted Papers	Accepted Papers	Sessions
A	28	27	3
B	292	279	35
C	13	13	2
D	10	9	2
E	12	10	1
F	80	78	10
G	6	4	1
J	10	10	1
K	47	46	7
URSI Special	74	73	1
Total	572	549	64

2018 IEEE AP-S/URSI Boston

URSI B Sessions – UB (28 sessions, 216 papers)

MO-UB.1A: Metamaterials: Part I

MO-UB.1A: Metamaterials: Part II

MO-UB.2P: Reconfigurable Arrays

TU-UB.1A: Numerical Methods: Part I

TU-UB.2A: Conformal and Curved Antenna Arrays

TU-UB.1P: Numerical Methods: Part II

TU-UB.2P: Applications of Electrically Small Antennas

TU-UB.3P: Antenna Array Theory and Measurement

TU-UB.4P: Electromagnetic Coupling and Interactions

WE-UB.1A: Numerical Methods: Part III

WE-UB.2A: Antenna Arrays in Advanced Applications

WE-UB.1P: Antenna Characterization and Design

WE-UB.2P: Imaging, Inverse Scattering and Remote Sensing: Part I

TH-UB.1A: Printed Antennas and Arrays

TH-UB.2A: Guided Waves and Waveguiding Structures

TH-UB.1P: Sensor Network and Cognitive Radio

THP-UB.1P: Frequency Selective Surfaces and Filters

THP-UB.2P: High Frequency Techniques and Metamaterials

THP-UB.3P: Nanoscale Electromagnetics

FR-UB.2A: Radio Wave Propagation and Scattering Effects

FR-UB.4A: Low noise and periodic devices

FR-UB.1A: MIMO Antennas and Systems

FR-UB.3P: Millimeter Wave and Terahertz Antennas

FR-UB.5P: Differential Equation Methods

FR-UB.3A: Numerical Methods: Part IV

FR-UB.1P: Metamaterials: Part III

FR-UB.2P: Complex, Novel or Specialized MediaFR

UB.4P: UWB Electromagnetics and Wireless
Communications

One missing as per table provided by Lance

2018 IEEE AP-S/URSI Boston

AP-S/URSI Joint Special Sessions – (16 sessions) + 2 are APS only

Innovative Phased Array Architectures and Beamforming Technology

Applications of Electromagnetics in Medicine and Biology

Implantable Devices for Wireless Biomedical Telemetry

Emerging Approaches and Future Trends in Electromagnetic Inverse Problems

Advances in Commercial Electromagnetic Simulation Tools

Gap waveguide and other antenna technologies for mm-wave applications

Modern A

Wideband

in Mobile

Functiona

EM Propa

Measure

GAP Wa

Characte

Next Gen

Reconfigurable RF Circuits for Wideband Antenna Systems

Advances in Steering the Beam of High Gain Antennas

Millimeter and Submillimeter wave Metasurfaces for Radar and Communication Systems

3-D Printed Antennas and Components for Practical RF Applications

Additive Manufacturing in Antennas and RF Systems

For Reference:

2012 APS/URSI Chicago, IL: 13 APS/URSI Joint Special Sessions

2013 APS/URSI Orlando, FL: 10 APS/URSI Joint Special Sessions

2014 APS/URSI Memphis, TN: 16 APS/URSI Joint Special Sessions

2015 APS/URSI Vancouver, Canada: 19 APS/URSI Joint Special Sessions

2016 APS/URSI Puerto Rico: 16 APS/URSI Joint Special Sessions

2017 APS/URSI San Diego: 18 APS/URSI Joint Special Sessions

2018 APS/URSI Boston: 16 APS/URSI Joint Special Sessions (+2 are APS only)

USNC/URSI Commission B Membership Committee

Steven Weiss (chair) – The Army Research Lab

Ed Rothwell – Michigan State University

George Hanson – University of Wisconsin-Milwaukee

Kathleen Melde – University of Arizona

Commission B Business Meeting
Boulder, CO
January 2019

Membership Guidelines

- Required qualifications:
 - technical competence
 - evidence: nominee's publications
 - interest in the activities of URSI
 - evidence: nominee's participation in URSI symposia
- Minimum publication/presentation numbers:
 - Early Career Member
 - Co-author of one URSI presentation in Commission B and attendance at one USNC-URSI symposium
 - Associate Member
 - minimum of 2-3 publications
 - two URSI presentations (at least one in Commission B)
 - Full Member
 - U.S. citizen or permanent resident
 - minimum of 5-6 publications
 - three URSI presentations (at least two in Commission B)

Commission B Nominees

■ For Full Membership:

■ Cagatay Tokgoz

- Phillip M. Drayer Department of Electrical Engineering, Cherry Building, Room 1621, Beaumont, TX 77713,
- ctokgoz@lamar.edu (409) 880-8744
- sponsor: Ronald Marhefka

■ Jose Martinez Lorenzo

- Northeastern University, 360 Huntington Avenue, Boston, MA 02115
- j.martinez-lorenzo@neu.edu (617) 832-5889
- sponsor: Jeffery Nanzer

■ For Associate Membership:

■ Bardley Jackson

- California State University, Northridge, 18111 Nordhoff St., Northridge, CA, 91330-8346
- bradley.jackson@csun.edu (818) 677-3931
- sponsor: Sembiam Rengarajan

Cagatay Tokgoz

■ U.S. Citizen

■ Ph.D. degree from The Ohio State University

■ Professional experience

- Since 2016, Dr. Tokgoz has been with Lamar University, Beaumont, TX, USA, as an Assistant Professor.
- He was a Graduate Research Associate with the Electro Science Laboratory, Department of Electrical and Computer Engineering, The Ohio State University, from 1997 to 2002.
- He was with Applied EM, Inc. as a Senior Research Engineer from 2002 to 2011, and the United Technologies Research Center as a Staff Research Scientist from 2011 to 2016.
- He was with the U.S. Air Force Research Laboratory as a Summer Faculty Fellow in 2017.

■ Research areas

- His research interests include high frequency methods in computational electromagnetics for modeling and simulation of antenna placement, co-site interference and radar signature as well as modeling and characterization of electrical fault precursors, and wireless and embedded sensors.

■ Qualifications summary (Full Member)

- Journal pubs: 8 (IEEE, JOSA, APL, Phys. Rev. B, etc.)
- URSI-B presentations: 6
- Participation in URSI:
 - NRS, AP/URSI, GASS

Jose Martinez-Lorenzo

- U.S. Citizen
- Ph.D., 2005, University of Vigo (Spain).
- Professional experience
 - 08/2013–present Assistant Professor, Northeastern University, College of Engineering, Dept. of Electrical and Computer Engineering.
 - 07/2010–08/2013 Research Assistant Professor, Northeastern University, College of Engineering, Dept. of Electrical and Computer Engineering.
 - 10/2006–06/2010 Senior Research Engineer, Northeastern University, College of Engineering, The Gordon Center for Subsurface Sensing and Imaging Systems (Gordon-CenSSIS).
 - 10/2004–10/2006 Assistant Professor, University of Oviedo (Spain), College of Engineering, Dept. of Electrical Engineering, School of Engineering.
 - 11/2002–10/2004 Research Assistant, University of Vigo (Spain), College of Engineering, Dept. of Signal Theory and Communications.
- Research areas
 - Not listed in the application.
- Qualifications summary (Full Member)
 - Journal pubs: 61 (IEEE Trans AP/MTT, AWPL, International Journals)
 - URSI-B presentations: > 30
 - Participation in URSI:
 - NRSM, AP/URSI

Bradley Jackson

- Canadian
- Ph.D., 2009, Queen's University, Canada
- Professional experience
 - Currently an Assistant Professor in the Department of Electrical and Computer Engineering at California State University, Northridge where I am conducting research on antennas.
 - From 2010 to 2017 I was a Scientist at Defence Research and Development Canada (DRDC), where I conducted research for Canada's Department of National Defence in the area of communications electronic warfare (predominately on antennas).
 - Prior to joining DRDC, I was a Postdoctoral Fellow at the Royal Military College of Canada, where I am currently an Adjunct Professor and actively collaborate with the electromagnetics researchers there.
- Research Fellow, Kuang-Chi Institute of Advanced Technology, Shenzhen, China
- Research areas
 - Electromagnetics, Antennas.
- Qualifications summary (Full Member)
 - Journal pubs: 28 (IEEE Antennas and Propagation, IET Microwaves, Antennas & Propagation, etc.)
 - URSI-B presentations: 5
 - Participation in URSI:
 - AP/URSI 2010, 2015, 2016, 2018

Membership Committee Recommendations

- The Committee unanimously recommends
 - Election to full member for
 - Cagatay Tokgoz
 - Jose Martinez-Lorenzo
 - Election to associate member for
 - Bradley Jackson