



International Union of Radio Science U.S. Commission B

R. Baktur, Chair
S. Sharma, Secretary
T. Karacolak, Technical Activities Chair

K. Warnick, Vice-Chair
S. Weiss, Membership Chair

Please reply to: Satish K. Sharma, ssharma@sdsu.edu

USNC-URSI Commission B Business Meeting Minutes: National Radio Science Meeting 2025
Boulder, CO
Jan 8, 2025 at 5:15 PM (MST)

1. Introduction

- Chair Reyhan Baktur called the meeting to order.
- Welcome to members and guest introductions for signing the attendance sheet including hardcopy attendance if one cannot use QR code.

2. Chair Report, Reyhan Baktur

- Chair mentioned USNC-URSI Commission B Officers from 2024 to 2026.
- Chair mentioned USNC-URSI 2024-2026 Leadership.
- Chair brought a discussion item from the USNC-URSI Business Meeting that *should we still post minutes because every commission seems to be different?* After a short discussion, a straw vote was conducted and membership voted to continue the process of taking notes and post meeting minutes as archive, and inform membership how to access it.
- Chair mentioned the Out-of-America Commission B Business Meeting in Florence, Italy, held in July 2024. The meeting minutes of this summer Business Meeting were unanimously approved and is posted at <https://acrobat.adobe.com/id/urn%3Aaaid%3Asc%3AUS%3Ae03bdc69-c533-49c7-abbe-2db31f14d77b/?filetype=application%2Fpdf>
- Chair mentioned the new U.S. Commission B Newsletter, which will be published a few times a year, and thanked its editor, Dr. Lauren Linkous. The early career and associate members can contribute by contacting Dr. Lauren Linkous. The newsletters will be archived.

- Chair mentioned that USNC-URSI has New Websites and a LinkedIn Page. NRSM Website: <https://nrsmboulder.org> and USNC-URSI Website: www.usncursi.org. LinkedIn: <https://www.linkedin.com/company/100634179/>. She further added that we have a commission B image created by ChatGPT, but we are open to new designs and ideas. Maybe early career members will be interested in generating a new image. Chair also asked if we should add anything to our commission's webpage?
- Chair discussed the benefits of becoming a member of the USNC-URSI Commission B at no cost. Interested should apply at: <https://usncursi.org/membership.php>
- Chair discussed the URSI and USNC-URSI Awards and their upcoming deadlines. Additional information about these awards can be found at https://usncursi.org/usnc_awards.php and https://usncursi.org/usnc_awards.php. She encouraged members to nominate colleagues for these awards.
- Chair conveyed the open position of a Vice President position for the International URSI. Eligible members can be nominated or self-nominated. Chair talked about the upcoming conferences in 2025 and 2026 and encouraged members to submit their papers.
- Chair discussed the 2026 NRSM planning and when we should organize Workshops during the conference between two possibilities: Jan 4, 2026 (Sunday) and Jan 8, 2026 (Thursday). Based on straw votes, Commission B membership voted for conducting the workshops on Jan 4, 2026 (Sunday).
- Chair also asked about the ideas for Workshops and Short Courses during NRSM 2026. She asked for a list of potential titles and organizers. Some suggestions were proposed by the members, such as direct-to-cell, SpaceX or AST, Lunar exploration, and Machine learning/AI.
- Chair mentions that interested members should propose special sessions for the NRSM 2026 and the deadline is May 1, 2025.
- Chair discussed the 2026 NRSM planning and asked for ideas for the Plenary Session. She requested that we share any recommendations for potential titles and speakers. Also mentioned that International speakers are welcome.
- Chair discussed about USNC-URSI E-Lectures activity. She asked about ideas for future E-lecture speakers (names and emails).
- Chair mentioned that the Sponsors and Exhibitors Committee needs volunteers. We seek volunteers to serve on this committee and help us secure sponsors and exhibitors for the 2026 NRSM. If someone from the commission is interested in serving, please provide names and email addresses.
- Chair discussed that the USNC-URSI needs a bigger / better social media presence and asked if someone from the commission is interested in helping us build this presence. Interested volunteers should provide names and email addresses.
- Chair mentioned that senior members should consider submitting to Radio Science Letters and discussed the benefits of submitting to this journal.
- Chair discussed the qualifications and experience for becoming a member of the USNC-URSI Commission B. She also discussed getting an Individual Membership in URSI (International). Nominations for (full, associate, early career) should be submitted online.
- One of the members asked that all the information about authors and references be removed for blind review for the student paper competitions.

3. Membership Committee Report, Steven Weiss

Members approved the new early career membership applicants (Stephen Newberry, Adnan Basir Patwary, Ryan Banks, and Secil Dogan) by unanimous vote.

Plans for membership growth were discussed, including asking potential members to attend the meeting and creating networking opportunities for students, early career members, in addition to all the members.

4. Technical Activities Report, Tutku Karacolak

A report on statistics for the 2025 NRSM was presented and compared with previous versions of this conference. We have increased submissions to NRSM 2025, with the numbers being similar to NRSM 2019. The report also included statistics on the IEEE AP-S/ITNC-USNC-URSI Radio Science Meeting and was compared with previous versions of this symposium. Information for proposing additional special sessions was shared. One of the members suggested creating certificates for special session organizers.

5. Additional business

None

6. Meeting adjourned at 6.12 PM, moved by Karl Warnick

Members attending: Reyhan Baktur, Nader Behdad, Sanghamitro Das, David Jackson, Tutku Karacolak, Edward Kuester, Roger Lang, Lauren Linkous, Ifana Mahbub, Eric Mokole, Amber Nunnally, Kai Ren, Yahia Rahmat-Samii, Satish Sharma, John Volakis, Karl Warnick, Steven Weiss, Donald R. Wilton.

Guest attending (*Not in alphabetic order*): Rebecca Haymore, Daniel Kemp, N. Burnett, Adnan Basir Patwary, Benjamin Bradshaw, Ravi Challa, Nanik Ram, Ananya Nandikanti, Miguel Saavedra-Melo, Erik Pineda-Alvarez, Sakib Reza, Abu Hena Murshed, Secil Dogan, Riley Hollman, Michael Suche, Sree Adinarayana Dasari, Ryan Banks, Mohammadreza, Bill Perkins, Ethan Wayland, Sarah Johnson, Robin Ying, Son Vu, Anh Vu, Ryan Green, Shashank, Shih-Ming Huang, Mehmet Ogut, Miheer Mayekar.

Minutes submitted by Satish Sharma, Secretary



Welcome

The USNC-URSI Commission B Business Meeting

January 8, 2024
Boulder CO

Please sign in





CHAIR REPORT

- Welcome to members and guests
- USNC and International URSI officers
- Approval of 2025 Summer Meeting Minutes
- Upcoming meetings
- Discussion Items (quite a few, but I trust our members that we will be efficient)

COMMITTEE REPORTS

- Technical Activities Report (Tutku Karacolak)
- Membership Report (Steven Weiss)
- Old business
- New business
- Adjourn



Welcome, Guest introductions



USNC-URSI Commission B 2024-2026 Leadership



Reyhan Baktur

Chair

ECE Dept.

Utah State University

E-mail: reyhan.baktur@usu.edu



Satish Sharma

Secretary

ECE Dept.

San Diego State University

E-mail: ssharma@sdsu.edu



Karl Warnick

Vice Chair

ECE Dept.

Brigham Young University

E-mail: warnick@ee.byu.edu



Steven Weiss

Membership Committee Chair

Army Research Lab

E-mail: steven.j.weiss14.civ@mail.mil



Tutku Karacolak

Technical Activity Chair

ECE Dept.

Washington State University

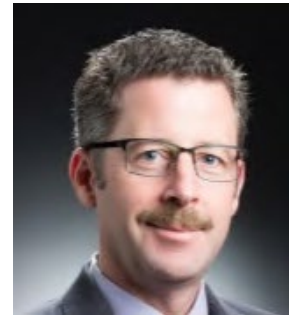
E-mail: tutku.karacolak@wsu.edu



USNC-URSI 2024-2026 Leadership



Jamesina Simpson
USNC Chair
Professor, Dept. of Electrical and
Computer
Engineering, University of Utah
E-mail: jamesina.simpson@utah.edu



Michael H. Newkirk
USNC Immediate Past Chair
Principal Professional Staff
The Johns Hopkins University
Applied Physics Laboratory
E-mail:
Michael.Newkirk@jhuapl.edu



Christopher Anderson
USNC Secretary and Chair-Elect Electrical
Engineer
NTIA/ITS
Email: canderson@ntia.gov



Gary S. Brown
USNC Accounts Manager
Bradley Distinguished Professor of
Electromagnetics,
Virginia Polytechnic Institute & State
University
E-mail: randem@vt.edu



Ourania "Rania" Kosti
Director Board on International Scientific
Organizations
The National Academies
E-mail: okosti@nas.edu



Ana Ferreras
Senior Program Officer
Board on International Scientific
Organizations
The National Academies
E-mail: AFerreras@nas.edu

Approval of the Last Meeting Minutes

- ❖ Discussions from the USNC URSI Business Meeting
 - Do we still post minutes? Every commission seems to be different.
 - We could recommend our ideas, and make a motion here.
- ❖ We had our Out-of-America Commission B Business Meeting in Florence, July 2024
- ❖ 2024 summer Commission B Business Meeting minutes are at <https://acrobat.adobe.com/id/urn%3Aaaid%3Asc%3AUS%3Ae03bd-c69-c533-49c7-abbe-2db31f14d77b/?filetype=application%2Fpdf>

Commission B Started Its Own Newsletter!

- Good job Dr. Lauren Linkous.
- We want to keep it running.
- Great place for students and early career members to contribute.
- We welcome collaboration with other commissions.

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

USNC-URSI B
FIELDS AND WAVES

URSI

Vol. 01

11.2024

COMMISSION B NEWSLETTER

Dear Colleagues and Friends,

Welcome to the inaugural edition of the USNC-URSI Commission B Newsletter! We are pleased to announce that Commission B has both a new newsletter **and** a new website. This newsletter will be published quarterly, providing information on the latest events, updates, and meetings.

What's New at a Glance:

- New newsletter
- New website: <https://usncursi.org>
- Florence, Italy [meeting minutes](#)
- 2025 NRSMBoulder meeting
- Student Paper Competition changes

The leadership of USNC-URSI is excited to reveal the launch of a new website that will integrate historical information from the previous site with updated content on the Committee's current and future activities, as well as those of its ten scientific Commissions. For more details, please visit: <https://usncursi.org/>

(Like our new Commission B USNC-URSI website image? It was created by ChatGPT!)

This July, we had one of the few, if not the first USNC-URSI Commission B Business Meeting in Florence, Italy. Many of our International URSI colleagues joined us for support. The meeting minutes are [linked here](#).

Next year's APS-URSI meeting will be held in Ottawa, Canada

Plenary Session Speaker
Silicon Photonics for LIDAR Sensors, Augmented Reality, Biophotonics, Quantum Engineering, and Beyond



Jelena Notaros
Massachusetts Institute of Technology

The 2025 NRSMB will be held from Jan. 7 - 10 in Boulder, CO at the University of Colorado. Paper submissions are closed, but we're **still accepting volunteers**. Contact nrsmboulder@colorado.edu for information. Student papers for the Student Paper Competition are now in a two-column, two-page summary paper format. More information is [linked here](#), or visit: <https://www.nrsmboulder.org/>

It's not too late to **become a member!** You can apply or nominate someone on the USNC-URSI page [linked here](#). Have questions? Reach out to our officers:

Reyhan Baktur (Chair, reyhan.baktur@usu.edu), **Karl Warnick** (Vice-Chair, warnick@ee.byu.edu), **Satish Sharma** (Secretary, ssharma@sdsu.edu), **Tutku Karacolak** (Technical Activities Chair, tutku.karacolak@wsu.edu), **Steven Weiss** (Member Nominations Chair, sweiss7@jh.edu)

Questions about the newsletter? **Lauren Linkous** (Editor, linkousl@ycu.edu)

https://usncursi.org/commission_b.php

USNC-URSI has New Websites and a LinkedIn Page!

- NRSM Website: <https://nrsmboulder.org>
- USNC-URSI Website: www.usncursi.org
 - Need an image for your commission? (Maybe an early career member can help generate an image? ChatGPT is OK.)
 - Want to add anything to your commission's webpage?
- LinkedIn: <https://www.linkedin.com/company/100634179/>



Apply for Membership in Our Commission

- No Cost
- Benefits:
 - Discounted registration at the NRSM
 - Eligibility to serve in USNC-URSI leadership positions
 - Eligibility to vote on topics relating to the commissions
 - Receive notifications of USNC-URSI activities and opportunities
- Apply at: <https://usncursi.org/membership.php>

URSI and USNC-URSI Awards

- Calls for nominations will be released in Spring 2025.
- USNC-URSI Awards
 - Due Aug. 1, 2025
 - More info: https://usncursi.org/usnc_awards.php
 - Chair's Award, Distinguished Radio Science Award, Outstanding Educator Award, Impact Award
- URSI Awards
 - Due to USNC-URSI by July 1, 2025
 - More Info: <https://www.ursi.org/awards.php>
 - Balthasar Van der Pol Gold Medal, Booker Gold Medal, Appleton Prize, Isaac Koga Gold Medal, Santimay Basu Prize, John Howard Dellinger Medal, Karl Rawar Gold Medal, The President's Award.

URSI Vice President Opening

- We need nominations by next Fall for the next URSI Vice President. Please nominate a colleague or ask someone to nominate you! The U.S. needs to have a presence at the international level. More information will be distributed soon.

Upcoming Conferences

- The Joint IEEE AP-S and North American Radio Science Meeting in Ottawa!
13 – 18 July 2025
Submission deadline: 20 January 2025
(2026 will be in Detroit, MI; 2027 in Kyoto, Japan; 2028 in San Diego, CA)
- URSI AP-RASC in Sydney!
17 – 22 August 2025
Submission deadline: 20 February 2025
- 2026 NRSM!
January 2026
Submission deadline: September 2026
- The next URSI GASS is in Krakow, Poland!
15 – 22 August 2026

2026 NRSM Planning

- Since CU – Boulder classes will be starting earlier in 2026, the 2026 NRSM will need to be Mon. – Wed., with workshops on either Sunday (Jan. 4) or Thurs. (Jan. 8). Does Commission B have feedback or a preference?
- We need ideas for Workshops and Short Courses. Please provide a list of potential titles and organizers. Up to 2 organizers per workshop / short course get 1/2 of their registration costs covered for organizing.

NRSM 2026 Special Sessions

- We attract many papers and new attendees via special sessions.
- We are looking for special session organizers for the 2026 NRSM. We need:
 - Session Titles
 - 2 confirmed organizer names and email addresses per session
- Who from your commission is interested in organizing a special session?

Deadline to finalize special sessions is 1 May 2025!

2026 NRSM Planning

- We need Plenary Session ideas. Please share your recommendation of potential titles and speakers.
- International speakers are welcome.

USNC-URSI E-Lectures

- Do you have ideas for future E-lecture speakers? Please provide names and emails.
- Next E-Lecture on Feb 20, 2025:
 - “Our Electromagnetic Window on the Universe,” David DeBoer
- Previous E-Lectures Posted
 - “Cognitive Radio: Driving Future Spectrum Exploitation,” Sven G. Bilén
 - “Artificial Intelligence and Bio-Inspired Computational Techniques in Applied Electromagnetics,” Magdy F. Iskander
- Videos and details available at: https://usncursi.org/e_lectures.php

USNC-URSI Sponsors and Exhibitors Committee

- The committee is vacant. We need a champion and additional volunteers to help secure sponsors and exhibitors for the 2026 NRSM.
<https://nrsmboulder.org/opportunities.php>
 - Student Mentoring Luncheon
 - Student Support (so we can continue to support ~80-100 students attending the NRSM)
 - New initiatives and events
- Who from your commission is interested in serving? Please provide names and email addresses.
- Do you have potential sponsor ideas and contacts? If so, can you reach out to them? And/or please provide names and contact info.
- USNC-URSI is looking for volunteers to serve on this committee and help us secure sponsors and exhibitors for the 2026 NRSM.
- Please let us know if you are interested or if you know someone who is interested in serving.

Social Media Presence

- USNC-URSI needs a bigger / better social media presence. Who from your commission is interested in helping us build this presence? Please provide names and email addresses.

2026 URSI Awards

- These URSI Awards are given at each GASS:

Senior Awards	Early Career Awards
Appleton Prize Booker Gold Medal* Dellinger Gold Medal* van der Pol Gold Medal Rawer Gold Medal	Basu Prize* Koga Gold Medal

*USNC-URSI funded and presented

- Please consider nominating a colleague!
 - Anticipated submission date is mid-August 2025
 - Call for nominations expected at the 2025 NRSM

Radio Science Letters

- Peer reviewed open access journal.
- Reduced page charges.
- <https://www.editorialmanager.com/RSL/>
- Challenges and benefits for us in long term.
- Senior members please consider contributing.

Membership in USNC-URSI Commission B

- Nominations for (**full, associate, or early career**) membership in Commission B should be submitted online.
- Applications are due by **December 1** of each year to be considered during the January meeting (unless the January meeting is not being held as was the case in 2020) or by **May 1** of each year to be considered during the summer AP-S/URSI joint symposium.
- Nomination form at: <https://usncursi.org/membership.php>

Individual Membership in URSI (International)

- By application through www.ursi.org
 - Requirements are similar to USNC membership

New Members: Requirements

Membership in Commissions of USNC-URSI predicated on technical competence in Radio Science/Engineering and interest in the activities of USNC-URSI and URSI.

- Evidence of **technical competence**: publications and accomplishments
- Evidence of **interest**: participation in URSI symposia
- *Allowances will be made for fewer articles of special significance, or for scientific and research accomplishments of unusual merit. NOTE: this is especially relevant to practitioners not able to publish.*
- Only Full members are considered voting members and may serve as officers; other member levels may serve on Committees, etc.

Member level	Citizen/residence	Journal	USNC-URSI/URSI presentations	USNC-URSI/URSI "in-commission"	Other
Full	US citizen or permanent resident	5-6	3	2	Scientific maturity & leadership
Associate	Reside in US (to remain)	2-3	2	1	
Early Career (student)	Enrolled at US university; ≤10 years after last degree	0	0	1	Attendance at 1 symposium
Early Career (non-student)	Employee at US univ., gov'n't, company AND reside in US; ≤10 years after last degree	0	0	1	Attendance at 1 symposium

Nominations for (full, associate, early career) should be submitted online.

Membership Report

Membership Growth

- What are some ideas for how your commission can grow your membership?
Please list them and implement some of your ideas.

Technical Committee Report

Any Updates (not covered so far)

- Old Business?
- New Business?
- Adjourn.

USNC/URSI Commission B Membership Committee

Steven Weiss (chair) – The Johns Hopkins University

Commission B
January 2025

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)

Membership Applications

- Election to Early Career Member:
 - Stephen Newberry
 - Adnan Basir Patwary
 - Ryan Banks
 - Secil Dogan
- Election to Associate Member:
 - No applications
- Election to Full Member:
 - No applications
- Applicants are asked to leave the room for the Commission B consideration of their application and the vote.

Commission B Nominees

- Early Career Membership
 - Stephen Newberry
 - Chipletz, Inc.
 - Phone : 973-552-2040
 - E-mail newb8262@vandals.uidaho.edu;
Stephen@ShieldDigitalDesign.com
 - sponsor: Dr. Ata Zadehgoel azadehgoel@uidaho.edu
 - U.S. Citizen
- M.S. in Electrical Engineering at the University of Idaho in December of 2024.
- Research interests: research in applications of machine learning to computational electromagnetic simulations.
- Co-author of one URSI presentation in Commission B and attendance at one USNC-URSI symposium - yes

Commission B Nominees

- Early Career Membership

- Adnan Basir Patwary

- The University of Texas at Dallas

- Phone : 940-331-8643

- E-mail adnanbasir.patwary@utdallas.edu

- sponsor: Ifana Mahbub ifana.mahbub@utdallas.edu

- Citizen no

- M.Sc. in Electrical Engineering (Non-thesis) from University of Texas at Dallas December 2024. My approximate graduate date for Ph.D. in Electrical Engineering in July 2025.

- Research interests: My research interest includes Microwave Circuits, Ultrawideband (UWB) Antennas, and RF Integrated Circuit (RFIC) Design.

- Co-author of one URSI presentation in Commission B and attendance at one USNC-URSI symposium - yes

Commission B Nominees

- Early Career Membership

- Ryan Banks

- Virginia Tech
 - Phone : 443-616-7623
 - E-mail ryban1@vt.edu
 - sponsor: Dr. Amir Zaghloul amirz@vt.edu
 - Citizen yes

- MSEE – Morgan State University, Completed 2015, PhD – VA Tech, Presently underway

- Research interests: My research is related to meta-material design using genetic algorithms. Also, research interest in material characterization conducting free space measurements and implementing algorithms such as Newton-Raphson, Nicolson-Ross Wier, etc.

- Co-author of one URSI presentation in Commission B and attendance at one USNC-URSI symposium - yes

Commission B Nominees

- Early Career Membership

- Secil Dogan

- The Ohio State University
 - Phone : 614-906-3306
 - E-mail dogan.21@osu.edu
 - sponsor: Joel Johnson johnson.1374@osu.edu
 - Citizen No

- Secil E. Dogan received her B.S. and M.S. degrees in Electrical and Electronics Engineering from Bilkent University, Ankara, Turkey, in 2018 and 2021, respectively. She is a Ph.D. student in the Department of Electrical and Computer Engineering at The Ohio State University
- Research interests: Her recent research focuses are on the analytical approaches for electromagnetic coupling problems and the ionospheric propagation high frequency (HF) range. Her research interests are electromagnetic wave theory, statistical analysis, electromagnetic compatibility, remote sensing, computational electromagnetics, method of moments, multilevel fast multipole algorithm, and machine learning.
- Co-author of one URSI presentation in Commission B and attendance at one USNC-URSI symposium - yes

Membership Recommendations

- Election to Early Career Member:
 - Stephen Newberry
 - Adnan Basir Patwary
 - Ryan Banks
 - Secil Dogan
- Election to Associate Member:
 - No applications
- Election to Full Member:
 - No applications

USNC-URSI National Radio Science Meeting



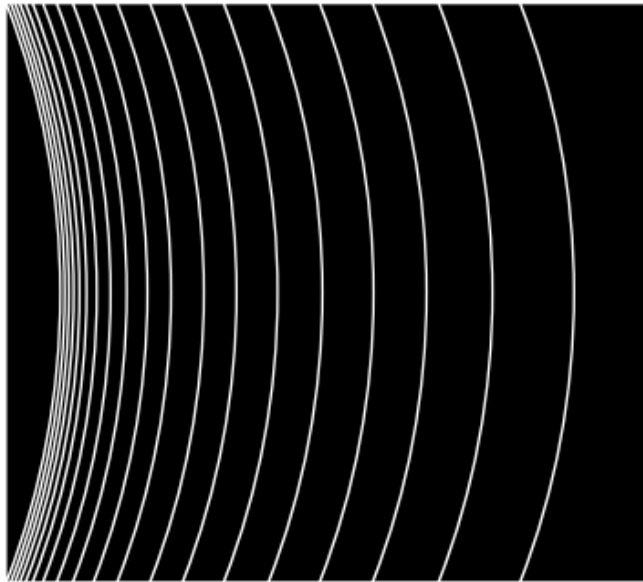
The National
Academies of | SCIENCES
ENGINEERING
MEDICINE



2025 USNC-URSI National Radio Science Meeting
January 7-10, 2025
University of Colorado at Boulder

URSI Commission-B Technical Activities Report

8 January 2025
Boulder, CO



7-10 January 2025

Boulder, Colorado, USA

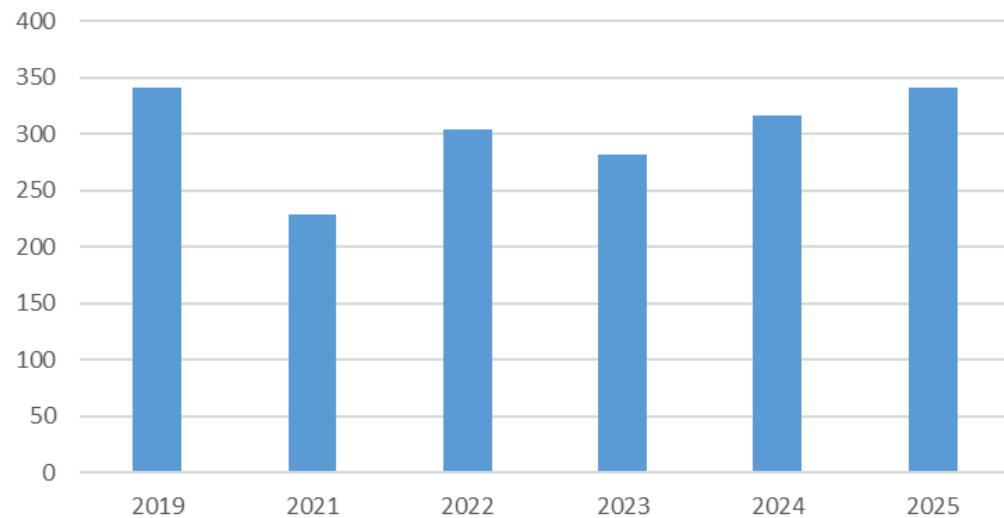
Sponsored by the US National Committee for the
International Union of Radio Science
and CU Conference Services,
University of Colorado Boulder
www.nrsmboulder.org

Tutku Karacolak
Washington State University Vancouver

NRSM 2025 Statistics

Category	2019	2021	2022	2023	2024	2025
Total Submissions	342	236	309	286	323	344
Total Accepted	341	229	304	282	316	341
Total Withdrawn	0	10	8	1	3	3
Total Presented	341	219	296	281	313	341
Number of Sessions	46	40	47	37	50	59
Number of Special Sessions	27	20	21	20	27	33

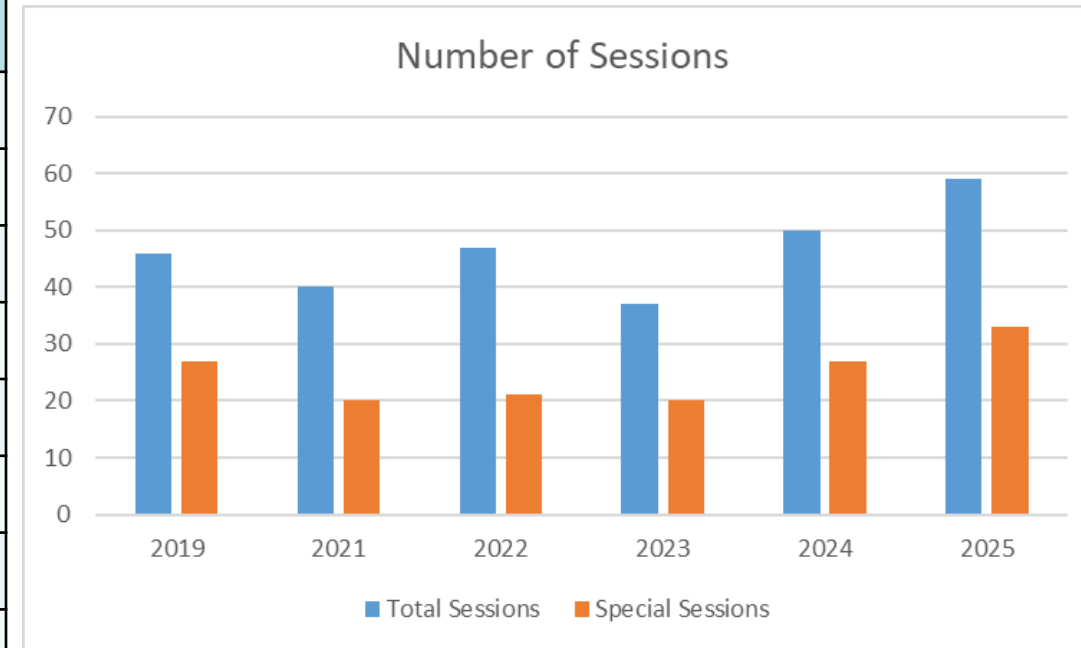
Number of Papers (Accepted)



2025	Total Submissions	Total Accepted	Total Withdrawn	Total Presented	Number of Sessions
A	12	12	0		2
B	33	33	0		4
C	3	2	1		2
D	9	9	0		2
E	7	7	0		2
F	25	25	0		4
G	12	11	1		3
H	11	11	0		2
J	24	24	0		3
K	12	12	0		2
SS (Special Sessions)	196	195	1		33

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
2020	NARSM	NARSM	NARSM
2021	229	40	22
2022	304	47	--
2023	282	37	59
2024	316	50	78
2025	341	59	74



- In 2025, one page abstracts: 250 and two page summaries: 91
- In 2023, one page abstracts: 219 and two page summaries: 63
- In 2022, one page abstracts: 220 and two page summaries: 75
- In 2021, one page abstracts: 159 and two page summaries: 60
- In 2019, one page abstracts: 283 and two page summaries: 58

Proposed Commission B Special Sessions, 2025 USNC-URSI NRSM, Boulder, Colorado **13 special sessions (53 papers)**

1. Near-field and Far-field Wireless Power Transfer

(4 papers) (Combined with #11 and #13)

(Joint Commission B and K Session): Sima Noghanian, CommScope (sima_noghanian@ieee.org) and Ifana Mahbub, Univ. of Texas, Dallas (Ifana.Mahbub@utdallas.edu)

2. Multifunctional Antennas and Arrays for Satellite and Wireless Communications

(3 papers)

Satish K. Sharma, San Diego State Univ. (ssharma@sdsu.edu) and Jia-Chi S. Chieh, NIWC-Pacific (jiachi.s.chieh.civ@us.navy.mil)

3. Quantum Technology Applications in Electromagnetics and Remote Sensing

(6 papers)

(Joint Commission B and F Session): Saba Mudaliar, AFRL (saba.mudaliar@us.af.mil) and Thomas Roth, Purdue University (rothte@purdue.edu)

4. Reconfigurable Intelligent Surfaces for Sensing and Imaging

(11 papers)

Mohammadreza F. Imani (mohammadreza.imani@asu.edu) and Georgios Trichopoulos (gtrichop@asu.edu), Arizona State University

5. Antennas for Planetary Exploration

(1 paper) (Combined with #8)

Justin Dennison (Justin.Dennison@jhuapl.edu) and Katherine Wolff (Katherine.Wolff@jhuapl.edu), Johns Hopkins University Applied Physics Laboratory

6. Advanced Modeling Techniques and Algorithms in Computational Electromagnetics

(5 papers)

Ata Zadehghol, University of Idaho (azadehghol@uidaho.edu) and Johannes Russer, Technical University of Munich (jrusser@tum.de)

7. Shaping Fields and Waves for a Smart Electromagnetic Environment

(1 paper)

Daniilo Erricolo (derric1@uic.edu), Pai-Yen Chen (pychen@uic.edu), and Aritra Banerjee (abaner33@uic.edu), University of Illinois Chicago

8. High Power Electromagnetic Environment Effects

(3 papers) (Combined with #5)

Avinash Sharma (Avinash.Sharma@jhuapl.edu) and Zachary Epstein (Zachary.Epstein@jhuapl.edu), Johns Hopkins University Applied Physics Laboratory

9. Reflectarrays and Reconfigurable Apertures

(5 papers)

John Volakis (jvolakis@fiu.edu) and Stavros Georgakopoulos (georgako@fiu.edu), Florida International University

10. Antenna and RF self-interference suppression techniques for in-band full-duplex communication systems

(5 papers)

Nader Behdad, Univ. of Wisconsin-Madison (behdad@wisc.edu) and Hung Luyen, Univ of North Texas (hung.luyen@unt.edu)

11. WPT for Lossy and Complex Environments

(2 papers) (Combined with #1 and #13)

David Jackson, Univ. of Houston (djackson@uh.edu) and Reyhan Baktur, Utah State Univ. (reyhan.baktur@usu.edu)

12. Spectrum management and Secure Communications

(5 papers)

John Volakis, Florida International Univ. (jvolakis@fiu.edu) and Satish K. Sharma, San Diego State Univ. (ssharma@sdsu.edu)

13. Metasurfaces for Advanced Antennas and Structures

(2 papers) (Combined with #1 and #11)

(Joint Commission B and K Session): Ifana Mahbub (Ifana.Mahbub@utdallas.edu) and Karthikeya Kakaraparty (karthikeya.kakaraparty@utdallas.edu), Univ. of Texas, Dallas

Final List Commission B Sessions, 2025 USNC-URSI NRSM, Boulder, Colorado

Special sessions: 9 sessions, 59 papers; B regular sessions: 4 sessions, 30 papers, (total URSI: 59 sessions, 33 special sessions, 341 papers)

Commission B Special Sessions:

- 1. WPT for Novel and Challenging Applications (Joint B - K Session, 10 papers)**
- 2. Multifunctional Antennas and Arrays for Satellite and Wireless Communications (5 papers)**
- 3. Quantum Technology Applications in Electromagnetics and Remote Sensing (Joint B - F Session, 10 papers)**
- 4. Reconfigurable Intelligent Surfaces for Sensing and Imaging (10 papers)**
- 5. Advanced Modeling Techniques and Algorithms in Computational Electromagnetics (5 papers)**
- 6. High Power Electromagnetic Environment Effects (4 papers)**
- 7. Reflectarrays and Reconfigurable Apertures (5 papers)**
- 8. Antenna and RF self-interference suppression techniques for in-band full-duplex communication systems (5 papers)**
- 9. Spectrum management and Secure Communications (5 papers)**

Commission B Regular Sessions:

- 1. Antenna Theory and Design (10 papers)**
- 2. Propagation, Scattering, and Sensing (5 papers)**
- 3. Devices, Systems, and Applications (10 papers)**
- 4. Numerical Methods and EM in Complex Media (5 papers)**

Commission B Special Sessions, 2024 USNC-URSI NRSM, Boulder, Colorado

7 special sessions (29 papers) B regular sessions: 41 papers, (total URSI: 50 sessions, 316 papers)

1. Advances in Wireless Power Transfer and Harvesting for Biomedical and Communication Applications

(Joint Commission B and K Session): Sima Noghanian, CommScope (sima_noghanian@ieee.org) and Yahia Rahmat-Samii, Univ. of California, Los Angeles (rahmat@ee.ucla.edu) (10 papers)

2. Multifunctional Antennas and Arrays for Satellite and Wireless Communications

Satish K. Sharma, San Diego State Univ. (ssharma@sdsu.edu) and Jia-Chi S. Chieh, NIWC-Pacific (jiachi.s.chieh.civ@us.navy.mil) (5 papers)

3. Antennas and Systems for Specialized Platforms and Environments

Reyhan Baktur, Utah State University (reyhan.baktur@usu.edu) and David R. Jackson, University of Houston (djackson@uh.edu) (No paper)

4. Complex EM and Meta Structures

Filippo Capolino, University of California, Irvine (f.capolino@uci.edu) and Juan Sebastian Gomez Diaz, University of California, Davis (jsgomez@ucdavis.edu) (6 papers)

5. Antennas for Planetary Exploration

Avinash Sharma (Avinash.Sharma@jhuapl.edu) Johns Hopkins University Applied Physics Laboratory, and Matthew Bray, Johns Hopkins University Applied Physics Laboratory (Matthew.Bray@jhuapl.edu) (3 papers)

6. Advanced Modeling Techniques and Algorithms in Computational Electromagnetics

Ata Zadehgol, University of Idaho (azadehgol@uidaho.edu) and Johannes Russer, Technical University of Munich (jrusser@tum.de) (No papers)

7. Progress in Reconfigurable Intelligent Surfaces (RIS)

Filippo Capolino, University of California, Irvine (f.capolino@uci.edu); Satish K. Sharma, San Diego State University (ssharma@sdsu.edu) (5 papers)

Commission B Special Sessions, 2023 USNC-URSI NRSM, Boulder, Colorado

7 special sessions (50 papers), B regular sessions: 20 papers, (total URSI: 37 sessions, 282 papers)

1. Low-Profile Millimeter-Wave/Terahertz Antennas for Mobile and Space Applications (10 papers)

Satish K. Sharma, San Diego State University (ssharma@sdsu.edu) and Goutam Chattopadhyay, JPL-NASA (goutam.chattopadhyay@jpl.nasa.gov)

2. Wearable antennas for WiFi, IoT, and 5G applications (Joint Commission B and K Session) (10 papers)

Sima Noghanian, CommScope, (sima_noghanian@ieee.org) and Yahya Rahmat-Samii, University of California, Los Angeles (rahmat@ee.ucla.edu)

3. Antennas and Systems for Specialized Platforms and Environments (10 papers)

Reyhan Baktur (reyhan.baktur@usu.edu), Utah State University and David R. Jackson, University of Houston (djackson@uh.edu)

4. Multiscale and Stochastic Modeling in Computational Electromagnetics (5 papers)

Ata Zadehgo, University of Idaho (azadehgo@uidaho.edu) and Johannes Russer, Technical University of Munich (jrusser@tum.de)

5. Novel Electrically Small Antennas and Matching Networks (5 papers)

Ting-Yen Shih, University of Idaho (tshih@uidaho.edu) and Kai Ren, Wentworth Institute of Technology (renk@wit.edu)

6. Complex EM and Meta Structures (5 papers)

Filippo Capolino, University of California, Irvine (f.capolino@uci.edu) and Juan Sebastian Gomez Diaz, University of California, Davis (jsgomez@ucdavis.edu)

7. Antennas for Planetary Exploration (5 papers)

Avinash Sharma (Avinash.Sharma@jhuapl.edu) Johns Hopkins University Applied Physics Laboratory, and Matthew Bray, Johns Hopkins University Applied Physics Laboratory (Matthew.Bray@jhuapl.edu)

Commission B Special Sessions, 2022 USNC-URSI NRS, Boulder, Colorado

7 special sessions (38 papers), B regular sessions: 43 papers, (total URSI: 47 sessions, 304 papers)

1. Low-Profile Millimeter-Wave/Terahertz Antennas for Mobile and Space Applications (TITLE CHANGE)

Goutam Chattopadhyay, JPL-NASA and Satish K. Sharma, San Diego State Univ. (5 papers)

2. High Power Electromagnetics (Joint Commission B and E Session):

D. V. Giri, Pro-Tech and R.L. Gardner (No session)

3. Antennas and Systems for Specialized Platforms: UAVs, UUVS, and SmallSats

Reyhan Baktur, Utah State University and David R. Jackson, University of Houston (9 papers: Combined with #4)

Combined Session title: Antennas and Systems for Specialized Platforms and Extreme/Harsh Environments

4. Antennas and Sensors for Harsh Environment

Sima Noghianian, Phoenix Analysis and Design Technologies; and Sayan Roy, South Dakota School of Mines

5. Multiscale and Stochastic Modeling in Computational Electromagnetics (5 papers)

Ata Zadehgo, University of Idaho and Johannes Russer, Technical University of Munich

6. 5G and Millimeter Wave Antennas and Applications (5 papers)

Adrew Chrysler, Idaho State University, and Ting-Yen Shih, University of Idaho

7. Complex EM and Meta Structures (8 papers)

Filippo Capolino, University of California, Irvine and Ashwin Iyer, University of Alberta

8. Novel Electrically Small Antennas and Matching Networks (NEW) (6 papers)

Ashwin Iyer, University of Alberta and Ting-Yen Shih, University of Idaho

Commission B Special Sessions, 2021 USNC-URSI NRS, Boulder, Colorado

7 B special sessions: 44 papers, B regular sessions: 41 papers (total URSI: 40 sessions, 229 papers)

1. Antennas and Sensors for Harsh Environment (4 papers)

Sima Noghanian, Wafer LLC and Sayan Roy, South Dakota School of Mines and Technology (sima_noghanian@ieee.org and Sayan.Roy@sdsmt.edu)

2. Low-Profile Antennas from Gigahertz to Terahertz (5 papers)

Goutam Chattopadhyay, JPL-NASA and Satish K. Sharma, San Diego State Univ. (goutam.chattopadhyay@jpl.nasa.gov and ssharma@sdsu.edu)

3. High Power Electromagnetics (Joint Commission B and E Session) (9 papers)

D. V. Giri, Pro-Tech and R.L. Gardner (giri@dv Giri.com and blitz32schreiber@gmail.com)

4. Wireless Communications for Specialized Platforms and Environments (Antennas for CubeSats and UAVs) (5 papers)

Reyhan Baktur, Utah State University and David R. Jackson, University of Houston (reyhan.baktur@usu.edu and djackson@uh.edu)

5. Multiscale and Stochastic Modeling in Computational Electromagnetics (6 papers)

Ata Zadehgo, University of Idaho and Johannes Russer, Technical University of Munich (azadehgo@uidaho.edu and jrusser@tum.de)

6. 5G and Millimeter Wave Antennas and Applications (5 papers)

Adrew Chrysler, Idaho State University, and Ting-Yen Shih, University of Idaho (chryandr@isu.edu and tshih@uidaho.edu)

7. Complex EM and Meta Structures (10 papers)

Filippo Capolino, University of California, Irvine and Ashwin Iyer, University of Alberta (f.capolino@uci.edu and iyer@ece.ualberta.ca)

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

2024 IEEE International Symposium on Antennas and Propagation and ITNC-USNC-URSI Radio Science Meeting

14-19 July 2024 • Florence, Italy

Papers submitted, accepted, rejected, and withdrawn (Breakdown: AP, URSI, URSI Commissions)

Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 2022	Total Accepted: 1836	Total Rejected: 28	Total Withdrawn: 158
- AP Submitted: 1603	- AP Accepted: 1464	- AP Rejected: 27	- AP Withdrawn: 112
- URSI Submitted: 419	- URSI Accepted: 372	- URSI Rejected: 1	- URSI Withdrawn: 46

2024 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting, Florence

URSI	Submitted Papers	Accepted Papers	Withdrawn Papers	Sessions
A	30	24	5	5
B	190	162	28	18
C	36	35	1	4
D	29	24	5	4
E	3	2	1	0
F	15	12	3	3
G	--	--	--	--
H	--	--	--	--
J	--	--	--	--
K	16	14	2	2
URSI Special	61	60	1	0
URSI Celebratory	39	39	0	1
Total	419	372	46	37

AP-S	Regular Sessions	Special Sessions	Celebratory Sessions
	163	20	6

2023 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting

13-28 July 2023 • Portland

Papers submitted, accepted, rejected, and withdrawn

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

Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 1464	Total Accepted: 1259	Total Rejected: 205	Total Withdrawn: 171
- AP Submitted: 1161	- AP Accepted: 998	- AP Rejected: 163	- AP Withdrawn: 134
- URSI Submitted: 303	- URSI Accepted: 261	- URSI Rejected: 42	- URSI Withdrawn: 37
- URSI from US: 143	- URSI from US: 136	- URSI From US: 7	- URSI from US: 7
- URSI from non-US: 160	- URSI from non-US: 125	- URSI From non-US: 35	- URSI from non-US: 30

	Sessions	
AP-S	139	Includes SS
URSI	54	Includes SS
URSI US	--	Includes SS
URSI Non-US	--	Includes SS

SS: Special Session

2023 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting, **Portland**

URSI	Submitted Papers	Accepted Papers	Withdrawn Papers	Sessions
A	16	16	0	5
B	148	131	17	25
C	39	24	15	6
D	17	15	2	4
E	9	6	3	2
F	16	13	3	6
G	-	-	-	-
H	-	-	-	-
J	-	-	-	-
K	15	15	0	3
URSI Special	43	41	2	16
Total	303	261	42	37

2024 version of this symposium we have

URSI	Submitted Papers	Accepted Papers	Withdrawn Papers
B	190	182	8
URSI (total)	419	372	46

2022 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting

10-15 July 2022 • Denver

Papers submitted, accepted, rejected, and withdrawn

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

Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 1473	Total Accepted: 1370	Total Rejected: 103	Total Withdrawn: 87
- AP Submitted: 1160	- AP Accepted: 1082	- AP Rejected: 78	- AP Withdrawn: 65
- URSI Submitted: 313	- URSI Accepted: 288	- URSI Rejected: 25	- URSI Withdrawn: 22
- URSI from US: 169	- URSI from US: 164	- URSI From US: 05	- URSI from US: 04
- URSI from non-US: 144	- URSI from non-US: 124	- URSI From non-US: 20	- URSI from non-US: 18

Sessions		
AP-S	140	Includes SS
URSI	59	Includes SS
URSI US	52	Includes SS
URSI Non-US	45	Includes SS

SS: Special Session

2022 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting, Denver

URSI	Submitted Papers	Accepted Papers	Withdrawn Papers	Sessions
A	15	13	00	04
B	150	139	10	26
C	29	21	01	04
D	--	--	--	--
E	10	09	01	02
F	25	24	01	06
G	--	--	--	--
H	--	--	--	--
J	--	--	--	--
K	31	30	01	07
URSI Special	53	52	01	22
Total	313	288	22	71

2024 version of this symposium we have

URSI	Submitted Papers	Accepted Papers	Withdrawn Papers
B	190	182	8
URSI (total)	419	372	46

2021 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting

4-10 December 2021 • Singapore

Papers submitted, accepted, rejected, and withdrawn

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

Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 1773	Total Accepted: 1502	Total Rejected: 271	Total Withdrawn: 46
- AP Submitted: 1239	- AP Accepted: 1072	- AP Rejected: 167	- AP Withdrawn: 36
- URSI Submitted: 267	- URSI Accepted: 215	- URSI Rejected: 52	- URSI Withdrawn: 5
- URSI from US: 87	- URSI from US: 72	- URSI From US: 15	- URSI from US: 1
- URSI from non-US: 180	- URSI from non-US: 143	- URSI From non-US: 37	- URSI from non-US: 4

	Sessions	
AP-S	133	Includes SS
URSI	52	Includes SS
URSI US	26	Includes SS
URSI Non-US	39	Includes SS

SS: Special Session

2021 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting, Singapore

URSI	Submitted Papers	Accepted Papers	Withdrawn Papers	Sessions
A	14	10	0	05
B	132	109	03	29
C	22	16	02	05
D	--	--	--	--
E	07	07	0	03
F	22	17	0	07
G	--	--	--	--
H	--	--	--	--
J	--	--	--	--
K	19	16	0	03
URSI Special	49	39	0	20
Total				

2024 version of this symposium we have

URSI	Submitted Papers	Accepted Papers	Withdrawn Papers
B	190	182	8
URSI (total)	419	372	46

2020 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting

5-10 July 2020 • Montréal, Québec, Canada

Papers submitted, accepted, rejected, and withdrawn

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

Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 1798	Total Accepted: 1514	Total Rejected: 100	Total Withdrawn: 184
- AP Submitted: 1349	- AP Accepted: 1168	- AP Rejected: 86	- AP Withdrawn: 95
- URSI Submitted: 449	- URSI Accepted: 346	- URSI Rejected: 14	- URSI Withdrawn: 89
- URSI from US: 213	- URSI from US: 159	- URSI From US: 3	- URSI from US: 51
- URSI from non-US: 236	- URSI from non-US: 187	- URSI From non-US: 11	- URSI from non-US: 38

2020 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting, **Montreal**

URSI	Submitted Papers	Accepted Papers	Withdrawn Papers	Sessions
A	21	16	5	2
B	206	152	47	27
C	33	29	4	4
D	47	36	8	6
E	2	1	0	0
F	39	27	9	6
G	2	2	0	0
H	3	3	0	1
J	20	19	1	4
K	19	16	3	2
URSI Special	57	45	12	2
Total	449	346	89	54

2024 version of this symposium we have

URSI	Submitted Papers	Accepted Papers	Withdrawn Papers
B	190	182	8
URSI (total)	419	372	46

Special Sessions for National Radio Science Meeting 2025

- Please contact Tutku Karacolak (tutku.karacolak@wsu.edu) by March 2025 to organize a special session during NRSM 2026.
- Thank you, Technical Activities Committee (TAC) Reviewers, for your service to Commission B papers reviewer activity.
- Thank you, USNC-URSI Commission B Officers, for your help in the reviewer and session-building activities.
- We hope to see you all at the IEEE AP-S/URSI Joint Symposium 2025 in Ottawa, Canada and NRSM 2026 in Boulder.
- Email: tutku.karacolak@wsu.edu