



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: The USNC-URSI Commission B Business Meeting, January 8, 2026, Boulder, CO, USA

January 8, 2026, at 5:30 PM (MST)

1. Introduction

- Chair Reyhan Baktur called the meeting to order.
- 2026 NRSN Sponsors were mentioned.
- Welcomed members and guests to sign the attendance sheet, including hardcopy attendance if one cannot use the QR code.
- Guests were introduced by Commission members. The IEEE AP-S president (Dr. C. J. Reddy) and the Chair of the International URSI (Prof. Ari Sihvola) were at the meeting.

2. Chair Report, Reyhan Baktur

- Chair mentioned USNC-URSI Commission B Officers from 2024 to 2026.
- Chair mentioned USNC-URSI 2024-2026 Leadership.
- Chair mentioned that Commission B's page has the past minutes, newsletter, and more: https://usncursi.org/commission_b.php
- Meeting minutes from the last meeting on July 14, 2025, have been posted (https://usncursi.org/commission_b.php under the Minutes section) and were approved unanimously.
- The chair congratulated the newest USNC-URSI awardees Profs. Volakis, Jackson, and Hagness. The chair welcomed and congratulated Prof. Notaros for being elected as secretary and chair-elect of USNC-URSI starting in 2027.

- Chair mentioned that the special session in honor of the late Prof. Chalmers Butler, celebrating his life, was a success and was well attended.
- Chair discussed the benefits of becoming a member of the USNC-URSI Commission B at no cost. Interested individuals should apply at: <https://usncursi.org/membership.php>. She mentioned bringing students/guests to URSI business meetings, introducing them to URSI, and making them members.
- Chair mentioned the upcoming Commission B elections, including Vice-Chair for the next triennium (Jan 2027 – Dec 2029). She also mentioned filling the commission officer positions, such as the secretary, technical activities chair, and membership committee chair. Only full members of the commission, B members, can vote.
- Chair mentioned that USNC-URSI has a new YouTube channel (<https://www.youtube.com/channel/UCKKfgrBLjvWQN6544xKf5KQ>). NRSMB Website: <https://nrsmboulder.org> and USNC-URSI Website: www.usncursi.org. LinkedIn: <https://www.linkedin.com/company/100634179/>. Any suggestions to improve the commission webpage are welcome. Students, early career members, and associate members are welcome to volunteer to design/improve the webpage.
- Chair mentioned the Commission B's Newsletters so far. She thanked the editor, Dr. Lauren Linkous, who has completed her tenure and is moving on to another venture in her career. She mentioned that we need to recruit another Editor for the newsletter and would seek nominations/interest from our membership. Anyone willing to volunteer should approach the chair.
- Chair mentioned the current/upcoming conferences: (i) Joint IEEE AP-S and North American Radio Science Meetings (2026 Detroit, 2027 Kyoto, 2028 San Diego), (ii) URSI GASS in Krakow, Poland (August 2026) and then in Singapore in 2029, and (iii) NRSMB 2027 (5-8 January 2027), NRSMB 2028 (4-7 January 2028), and NRSMB 2029 (9-12 January 2029), all in Boulder, CO.
- Chair raised some questions for the members: (i) IEEE AP-S is a technical co-sponsor of the NRSMB, and we have a long history of interactions with IEEE AP-S, (ii) Currently, only some commissions participate in the joint summer IEEE AP-S/URSI symposium. USNC-URSI could help expand the topics covered by the joint symposium, help grow the conference, and provide a unique opportunity by encouraging all of the commissions to participate. (iii) If your commission is not already participating in the joint IEEE AP-S/URSI symposium, would you have an interest?
- Chair sought the ideas for Workshops and Short Courses for NRSMB 2027 planning. Those interested in proposing these, please provide a list of potential titles and organizers. Up to 2 organizers per workshop / short course get ½ of their registration costs covered for organizing.
- Chair asked for ideas for the Plenary Session. There were some suggestions from the members, such as SpaceX: Direct-to-cell, intersatellite propagation, ducted photonics, non-linear and time-varying EM, etc. She requested that we share any recommendations for potential titles and speakers. It was also mentioned that international speakers are welcome.
- Chair discussed the NRSMB 2027 Special Session Plans. Those interested should contact the chair and the TAC Chair by May 1, 2026. There were some suggestions from the members, such as the History of electromagnetic analysis, reconfigurable and adaptive spectrum

communications, frequency spectrum management, and potential combined Commission B and E topics.

- Chair mentioned the NRSM 2027 would need reviewing and session chairing help from the interested commission members.
- Chair discussed the USNC-URSI E-Lectures activity. She asked about ideas for future E-lecture speakers (names and emails). Next (5th) E-Lecture will be on 27 Feb 2026: “An Overview of Metamaterials from a Transmission-Line Perspective,” by Prof. George V. Eleftheriades. Videos of previous E-Lectures are available on our YouTube channel.

3. Membership Committee Report, Steven Weiss

The membership committee chair presented the requirements for each membership level. Three membership applications were brought for discussion. All three applications were approved unanimously by the full members in attendance.

4. Technical Activities Report, Tutku Karacolak

A report on statistics for the 2026 NRSM and 2025 Joint IEEE AP-S and North American Radio Science Meetings (Ottawa) was presented and compared with previous versions of this conference. It was noticed that the number of withdrawn papers for AP-S/URSI 2025 has increased. The NRSM 2026 has seen an increase in the number of papers submitted/presented compared to previous versions in recent years. Get in touch with Tutku for Special session requests.

5. Additional business

None

6. Meeting adjourned at 6.30 PM

Members attending (*Not in alphabetic order*): William Johnson, Sembiam R. Rengarajan, Adam Hicks, Satish Sharma, Kai Ren, Steven Weiss, Gary Brown, Robert Nevels, Donald R. Wilton, Uslenghi Piergiorgio, Susan Hagness, Eric Mokole, Roger Lang, Karl Warnick, Prabhakar Pathak, Jamesina Simpson, Tutku Karacolak, David R. Jackson, George Trichopoulos, Junming Diao, John Volakis, Branislav Notaros, Amber Nunnally, Richard Ziolkowski.

Guest attending (*Not in alphabetic order*): C. J. Reddy, Henry Nance, William Clinton Snider III, Ata Zadehgo, Cody Scarborough, Ethan Wayland, Arthur Gratas, Nhat Truong, Ari Sihvola, Steven Perry, Hossein Mehrpour Bernety, Alptug Seref Ayyildiz, Ridge Poll, Ryan Watson, Michael Suche, Ryan Westafer, Nickolas Rhodes, Sarah Johnson.

Minutes submitted by Satish Sharma, Secretary

Welcome to the **2026 NRSM Commission B Business Meeting**

SCAN ME

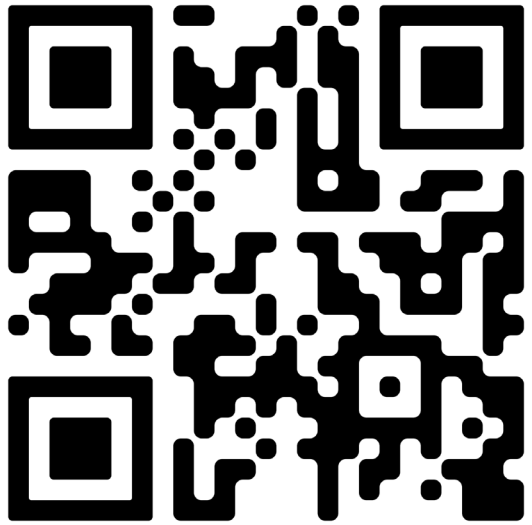


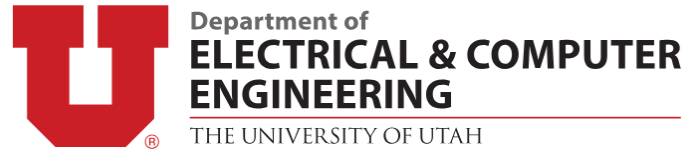
Image Courtesy of
Chris Anderson

Thank You 2026 NRSM Sponsors!

GOLD Sponsors:



BRONZE Sponsors:



Other Sponsor (WIRS Reception):



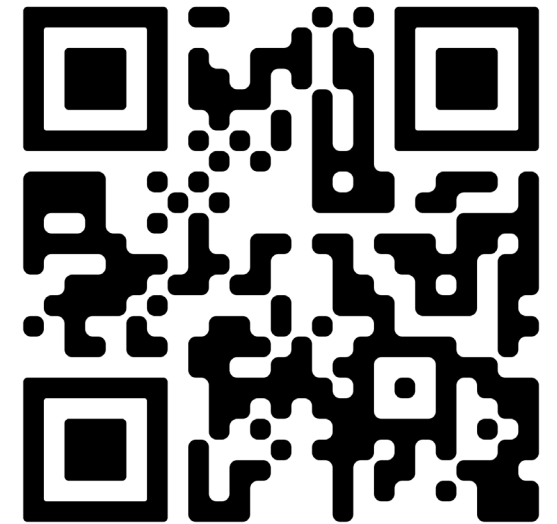
Technical Co-Sponsor:



Welcome Guests!

- If you brought a guest with you, please introduce them.
- OR: If you are a guest not attending with a member, please introduce yourself!

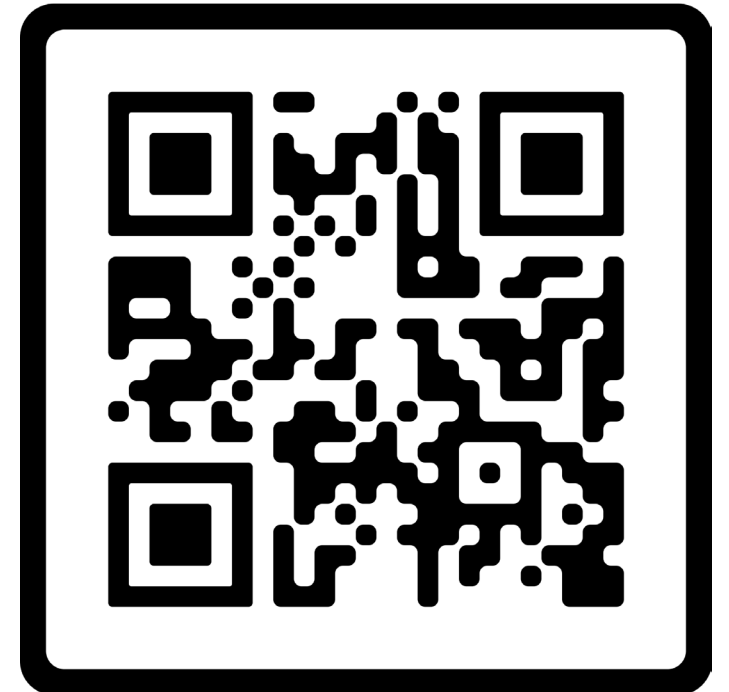
SCAN ME



Approve 2025 Summer Meeting Minutes

<https://usncursi.org/>

SCAN ME



Congratulations!

Apply for Membership in Commission B

- No cost, but requires a vote by commission members
- Benefits:
 - Discounted registration at the NRSM
 - Eligibility to serve in USNC-URSI and later URSI leadership positions
 - Eligibility to vote on topics relating to the commissions
 - Receive notifications of USNC-URSI activities and opportunities
- Regarding eligibility: Students can join as Early Career Members; Peer-reviewed classified documents can count as relevant publications.
- Apply at: <https://usncursi.org/membership.php>

Criteria for New Member Applications

- Evidence of **technical competence**: Publications and accomplishments
- Evidence of **interest**: Participation in USNC-URSI activities, meetings, and conferences
- *Allowances will be made for fewer numbers of articles with special significance, for scientific and research accomplishments of unusual merit, and for practitioners with classified peer-reviewed documents not available in the open literature.*
- Only Full members are 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

Commission B Elections

- We are filling the position of Vice Chair in Commission B for the next triennium (Jan 2027 – Dec 2029).
 - Do we want to create / fill any new positions in our commission to help create a pipeline of officers (e.g. secretary)?
 - Only full members of the commission should vote.

Commission B's Webpage

- <https://usncursi.org/>
- Currently we have Commission B Newsletters, Minutes, and officers on the website.
- We could improve.
- Students, early career members, and associate members are welcome to volunteer to design/improve the webpage.

Some Upcoming Conferences of Interest

- **IEEE AP-S / URSI in Detroit, MI**
12 – 17 July 2026
Submission deadline: 23 January 2026
(2026 will be in Detroit, MI; 2027 in Kyoto, Japan; 2028 in San Diego, CA)
- **URSI GASS in Krakow, Poland**
15 – 22 August 2026
(2029 will be in Singapore)
- **Potential dates for the next USNC-URSI NRSM's:**
5 – 8 January 2027
4 – 7 January 2028
9 – 12 January 2029

Questions for the Commission

- IEEE AP-S is a technical co-sponsor of the NRSM, and we have a long history of interactions with IEEE AP-S.
- Currently, only some commissions participate in the joint summer IEEE AP-S/URSI symposium. USNC-URSI could help expand the topics covered by the joint symposium, help grow the conference, and provide a unique opportunity by encouraging all of the commissions to participate.
- If your commission is not already participating in the joint IEEE AP-S/URSI symposium, would you have an interest?

2027 NRSM: Workshops & Short Course Ideas

- 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 ½ of their registration costs covered for organizing.

Topic / Title	Organizer 1 Name	Organizer 1 Email	Organizer 2 Name	Organizer 2 Email

2027 NRSM: Plenary Session Ideas

Topic / Title	Suggested Speaker Name (if known)	Speaker Email

NRSM 2027 Special Session Plans

- Who from your commission is interested in organizing a special session?

Topic / Title (indicated which commission(s))	Organizer 1 Name	Organizer 1 Email	Organizer 2 Name	Organizer 2 Email

Deadline to finalize special sessions is 1 May 2026!

NRSM 2027 Reviewing and Session Chairing Help

- Would you like to volunteer to help review abstracts and summaries submitted to the 2027 NRSM?
 - Most reviewing is done during a 2-week period after the submission deadline in September.
- Would you like to volunteer to help chair sessions as needed during the 2027 NRSM?

USNC-URSI E-Lectures

- Do you have ideas for future E-lecture speakers? Please provide names and emails.
- Next (5th) E-Lecture will be on 27 Feb 2026:
“An Overview of Metamaterials from a Transmission-Line Perspective,”
by Prof. George V. Eleftheriades
- Videos and details of previous E-lectures are available:
 - On the USNC-URSI Webpage: https://usncursi.org/e_lectures.php
 - On the USNC-URSI YouTube Channel: <https://www.youtube.com/@USNC-URSI>

Old Business

New Business

Adjourn

Will someone make a motion to adjourn the meeting?

USNC/URSI Commission B Membership Committee

Steven Weiss (chair) – The Johns Hopkins University

Commission B
January 2026

Membership Guidelines

■ Required qualifications:

- Nominees for Full Member must be citizens or permanent residents of the US.
- Nominees for Associate Member must reside in the US, and Associate Members must reside in the US, to remain Associate Members. There is no citizenship or permanent residency requirement for Associate Members.
- Nominees for Early Career Member must be either (a) enrolled as a student at a US university, or (b) employed at a US university or government organization, or at a company with facilities in the US, and must reside in the US. Early Career Members must continue to reside in the US to remain Early Career Members. There is no citizenship or permanent residency requirement for Early Career Members.

Membership Guidelines

■ Required qualifications:

- Nominees for Early Career Member are limited to individuals having ten (10) years or fewer of professional experience since their last academic degree (bachelor's or higher). The experience need not be continuous.
- Any member of the Commission can nominate qualified persons for Member, Associate Member, or Early Career Member in the Commission, provided that the person making the nomination holds a level of membership at least as high as the level for which the nomination is made. A separate nomination form should be completed for each nominee.
- No limit is imposed on the number of nominations which a Commission member can make if the nominees are from outside the sponsor's institution. A sponsor is allowed to nominate one person from his or her own organization for Member and one for Associate Member for consideration at any one regular meeting of the Commission. No limit is imposed on the number of Early Career Member

Membership Guidelines

■ Required qualifications:

- Membership in Commissions of USNC-URSI is predicated on technical competence in Radio Science/Engineering and interest in the activities of USNC-URSI and URSI. Evidence of technical competence is to be found from the nominee's publications and accomplishments, and evidence of interest in the activities of URSI is to be supported by the nominee's participation in URSI symposia. Guidelines for minimum requirements are as follows:

- Full Member: Five to six journal publications and three USNC-URSI or URSI presentations, with two in the Commission. In addition, Member nominees should have evidence of scientific maturity and leadership in their work.
- Associate Member: Two to three journal publications and two USNC-URSI or URSI presentations, with one in the Commission.
- Early Career Member: co-author of one USNC-URSI or URSI presentation in the Commission and attendance at one USNC-URSI symposium.
- Allowances will be made for fewer articles of special significance, or for scientific and research accomplishments of unusual merit.

Membership Guidelines

- Required qualifications:

- Nominations are normally considered only at the regular Business Meetings of the Commission. Exceptions to this (e.g., holding elections of new Members by email voting) are allowed by the USNC-URSI Constitution; the USNC-URSI Executive Committee (Chair, Secretary/Chair-Elect, Immediate Past Chair, and Accounts Manager) should be informed in advance of an email election of new Members. The results of the election must be forwarded to the USNC-URSI Executive Committee as soon as possible after the election is held.
- Early Career Members and Associate Members are nonvoting members of the Commission; Full Members are voting members of the Commission. Early Career Members and Associate Members may not serve as officers of the Commission. They may serve on committees of the Commission as directed by the Chair or Vice Chair of the Commission.

Commission B Nominees: Early Career Member

■ Nominee:

- Name: Cody Scarborough
- Organization: The University of Colorado Boulder
- Email: cody.scarborough@colorado.edu
- Phone: (303) 735-4804
- Citizenship: US Citizen

■ Category of Membership:

- Commission: *B – Fields and Waves*
- Membership Level: *Early Career Member*

■ A Member of the Commission who knows the Nominee:

- Name: Kamal Sarabandi
- Organization: The University of Michigan
- Email: sarabandi@umich.edu
- Phone: (734) 936-1575

■ Briefly describe your educational background, including institution(s), degree(s),

■ and years attended. I received by B.S. degree from the University of Texas at Austin in Electrical Engineering in 2017 and received by Ph.D. degree in Electrical Engineering and Computer Science from the University of Michigan in 2022. I have been an Assistant Professor at the University of Colorado Boulder since August of 2022.

■ Briefly describe your work / research-related radio science experience. My work is focused on the design of electromagnetic metamaterials and metasurfaces for beam-forming, wireless power transfer, and pulse synthesis. My Ph.D. degree was focused on the design of spatio-temporally modulated metamaterials to achieve non-reciprocity, frequency-mixing, and amplification. My more recent research efforts have focused on designing nonlinear and active electromagnetic structures for pulse synthesis, high-power microwave generation, and rectification.

■ Publication requirements: met

Commission B Nominees: Associate Member

- Nominee:
 - Name: William Clinton Snider III (Clint)
 - Organization: Auburn University
 - Email: wcsnider@auburn.edu
 - Phone: 843-709-8026
 - Citizenship: U.S. Citizen
- Category of Membership:
 - Commission: B
 - Membership Level: Associate Member
- A Member of the Commission who knows the Nominee (*optional*):
 - Name: Dr. Reyhan Baktur
 - Organization: Utah State University
 - Email: Reyhan.baktur@usu.edu
 - Phone: 435-797-2955
- Briefly describe your educational background, including institution(s), degree(s), and years attended.
- University of Florida, PH.D. Electrical and Computer Engineering, August 2017 - May 2023, Gainesville, FL. Thesis: Numerical Methods in Long-Wavelength Near-Field Scattering.
- Briefly describe your work / research-related radio science experience. I started as Visiting Assistant Professor at Auburn University in summer 2023 and as an assistant professor January 1st, 2024. I teach electromagnetics at the undergraduate level and manage the Theory and Research in Applied Computational Electromagnetics (TRACE) Lab with 3 graduate students and 2 undergraduates. I have spent the time, since starting at Auburn University, developing a robust suite of finite-difference time-domain computational tools. My graduate students and I have begun publishing this work and have much more to come, including 3 presentations at the coming USNC-URSI 2026.
- Publication requirements: met.

Commission B Nominees: Associate Member

- Nominee:
 - Name: Priyanka Mondal
 - Organization: National Radio Astronomy Observatory
 - Email: pmondal@nrao.edu pri.mondal@gmail.com
 - Phone: Office: 434-296-0290, Cell: 434-400-3785
 - For Associate Member applicants: Do you reside in the U.S.? yes
 - Citizenship: not US or permanent member.
- Category of Membership:
 - Commission:
 - B – Fields and Waves
 - Membership Level: Associate Member
- A Member of the Commission who knows the Nominee (optional):
 - Name: Satish Sharma
 - Organization: San Diego State University
 - Email: ssharma@sdsu.edu
 - Phone: 619-594-0241
- Briefly describe your educational background, including institution(s), degree(s), and years attended. I have earned my Ph. D from the Department of Electronics and Communication Engineering, Indian Institute of Technology Kharagpur, India in the year of 2009 and M. Tech. form Institute of Radio Physics and Electronics, University of Calcutta, India in the year of 2004.
- Briefly describe your work / research-related radio science experience. I am passionate about my work and a motivated researcher with 15+ years of experience across multinational academic and industrial organizations in microwave and millimeter-wave engineering. I have experiences of mentoring graduate and post-graduate students, giving talks, troubleshooting complex scenarios, and extensive track record of publications. Always enthusiastic to learn new things and can connect well, with due respect with the team members, professionals. I work on component design, measurements (room temperature, cryogenic), system/sub-system integration and my 6esearch interest include amplifiers, local oscillator system, and antenna frontend.
- Publication requirements: met.

Membership Recommendations

- Election to Early Career Member:
 - Cody Scarborough
- Election to Associate Member:
 - William Clinton Snider III (Clint)
 - Priyanka Mondal



NATIONAL ACADEMIES Sciences Engineering Medicine



2026 National Radio Science Meeting

6 - 9 January 2026 • Boulder Colorado

URSI Commission-B Technical Activities Report

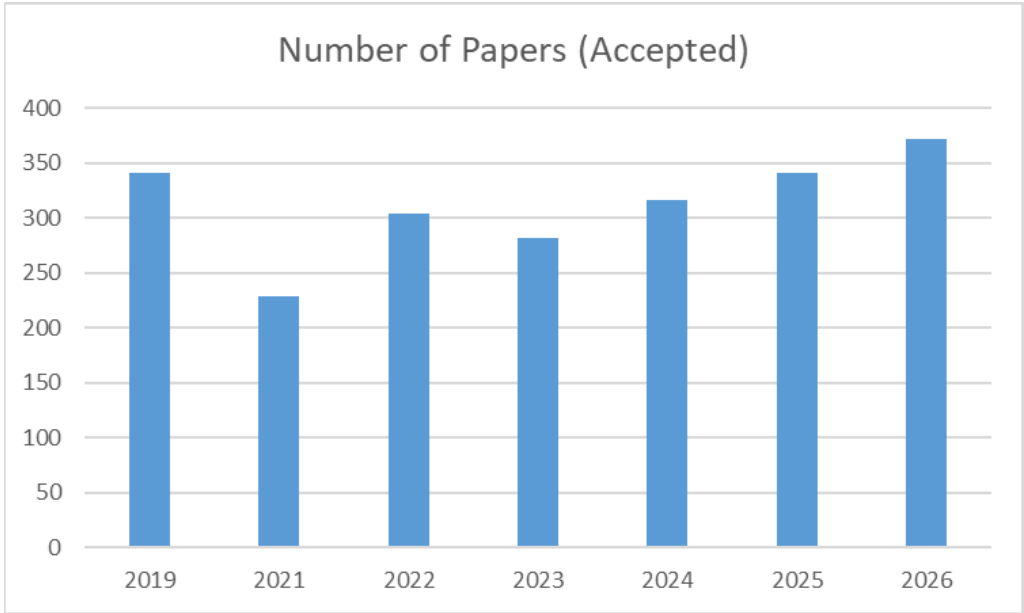
8 January 2026 Boulder, CO

Tutku Karacolak
Washington State University Vancouver

NRSM 2026 Statistics

Category	2019	2021	2022	2023	2024	2025	2026
Total Submissions	342	236	309	286	323	344	380
Total Accepted	341	229	304	282	316	341	372
Total Withdrawn	0	10	8	1	3	3	8
Total Presented	341	219	296	281	313	341	372
Number of Sessions	46	40	47	37	50	59	63
Number of Special Sessions	27	20	21	20	27	33	36

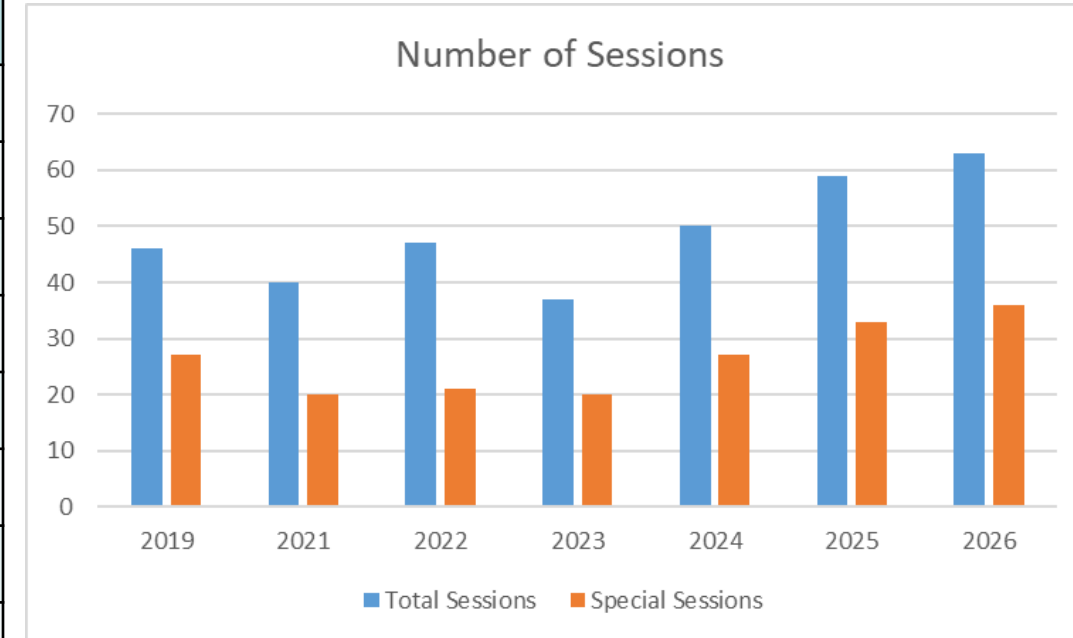
Number of Papers (Accepted)



2026	Total Submissions	Total Accepted	Total Withdrawn	Total Presented	Number of Sessions
A	10	10	0	10	2
B	38	38	0	38	5
C	15	14	1	14	2
D	4	4	0	4	1
E	7	7	0	7	1
F	30	29	1	29	5
G	21	21	0	21	4
H	13	13	0	13	3
J	16	16	0	16	3
K	13	13	0	13	1
SS (Special Sessions)	213	207	6	207	36

National Radio Science Meeting Conference Statistics

Year	# Papers	# Sessions	# Travel Grants
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
2026	372	63	60



- In 2026, one page abstracts: 269 and two page summaries: 111
- 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

Proposed Commission B Special Sessions, 2026 USNC-URSI NRSM, Boulder, Colorado **10 special sessions (60 papers)**

1. Wearable Antennas

(10 papers)

(Joint Commission B/K Session): Sima Noghianian, CommScope (sima_noghianian@ieee.org), Yahya Rahmat-Samii, University of California Los Angeles (rahmat@ee.ucla.edu), and Erdem Topsakal, Virginia Commonwealth University (etopsakal@vcu.edu)

2. Multifunctional Antennas and Arrays for Satellite and Wireless Communications

(3 papers)

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

3. Quantum Technology Applications

(9 papers)

(Joint Commission A/B/F Session): Saba Mudaliar, AFRL (saba.mudaliar@us.af.mil), Thomas Roth, Purdue University (rothte@purdue.edu), and Matthew Simons, NIST (Matthew.simons@nist.gov)

4. New Applications Enabled by Intelligent Surfaces in Future Wireless Networks

(10 papers)

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

5. Advanced Modeling Techniques and Algorithms in Computational Electromagnetics

(3 papers)

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

6. Antennas and EM Systems for UAVs, UUVs, and Mobile Platforms

(10 papers)

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

7. Special Session in Memory of Prof. Chalmers Butler

(10 papers)

Piergiorgio L. E. Uslenghi, University of Illinois-Chicago (uslenghi@uic.edu) and Donald R. Wilton, University of Houston (wilton@uh.edu)

8. NRDZ and Interference Mitigation

(0 paper)

9. Spectrum Management and Secure Communications

(0 paper)

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

10. Non-LTI Electromagnetics - Progress, Challenges, and Opportunities

(5 papers)

Ryan Westafer, Georgia Tech University (Ryan.Westafer@gti.gatech.edu) and Daniel Richardson, University of Colorado Boulder (Daniel.Richardson@colorado.edu)

Final List Commission B Sessions, 2026 USNC-URSI NRSM, Boulder, Colorado

Special sessions: 8 sessions, 63 papers; B regular sessions: 5 sessions, 36 papers, (total URSI: 63 sessions, 36 special sessions, 372 papers)

Commission B Special Sessions:

- 1. Wearable Antennas (Joint B - K Session, 10 papers)**
- 2. Multifunctional Antennas and Arrays for Satellite and Wireless Communications (4 papers)**
- 3. Quantum Technology Applications (Joint A - B - F Session, 9 papers)**
- 4. New Applications Enabled by Intelligent Surfaces in Future Wireless Networks (10 papers)**
- 5. Advanced Modeling Techniques and Algorithms in Computational Electromagnetics (5 papers)**
- 6. Antennas for Novel Platforms and RIS (10 papers)**
- 7. Analytical and Numerical Methods in EM Theory and Applications - In Memory of Chalmers M. Butler (10 papers)**
- 8. Non-LTI Electromagnetics - Progress, Challenges, and Opportunities (5 papers)**

Commission B Regular Sessions:

- 1. Antenna, Theory, and Design (9 papers)**
- 2. Propagation, Scattering and Sensing (9 papers)**
- 3. Intelligent Devices and Complex Systems (10 papers)**
- 4. Electromagnetic Theory and Education (5 papers)**
- 5. Numerical Methods (3 papers)**

Commission B Special Sessions, 2025 USNC-URSI NRSN, Boulder, Colorado
Special sessions: 9 sessions, 59 papers; B regular sessions: 4 sessions, 30 papers
(total URSI: 59 sessions, 33 special sessions, 341 papers)

1. WPT for Novel and Challenging Applications (Joint B - K Session, 10 papers)

Ifana Mahbub, Univ. of Texas, Dallas (Ifana.Mahbub@utdallas.edu) and David Jackson, Univ. of Houston (djackson@uh.edu)

2. Multifunctional Antennas and Arrays for Satellite and Wireless Communications (5 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 (Joint B - F Session, 10 papers)

Saba Mudaliar, AFRL (saba.mudaliar@us.af.mil) and Thomas Roth, Purdue University (rothte@purdue.edu)

4. Reconfigurable Intelligent Surfaces for Sensing and Imaging (10 papers)

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

5. Advanced Modeling Techniques and Algorithms in Computational Electromagnetics (5 papers)

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

6. High Power Electromagnetic Environment Effects (4 papers)

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

7. Reflectarrays and Reconfigurable Apertures (5 papers)

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

8. 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)

9. 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)

Commission B Special Sessions, 2024 USNC-URSI NRSN, 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 Zadehgo, University of Idaho (azadehgo@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 NRSN, 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 Zadehghol, University of Idaho (azadehghol@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 NRSM, 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 Noghanian, 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

2025 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting

13-18 July 2025 • Ottawa, Canada

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

Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 1295	Total Accepted: 1166	Total Rejected: 59	Total Withdrawn: 70
- AP Submitted: 968	- AP Accepted: 862	- AP Rejected: 53	- AP Withdrawn: 53
- URSI Submitted: 327	- URSI Accepted: 304	- URSI Rejected: 6	- URSI Withdrawn: 17

2025 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting, Ottawa

URSI	Submitted Papers	Accepted Papers	Rejected Papers	Withdrawn Papers	Sessions
A	27	24	2	1	2
B	191	180	2	9	20
C	18	16	0	2	2
D	21	18	1	2	2
E	3	3	0	0	0
F	14	14	0	0	2
G	--	--		--	--
H	--	--		--	--
J	--	--		--	--
K	12	11	0	1	1
URSI Special	41	38	1	2	
Total	327	304	6	17	29

AP-S	Regular Sessions	Special Sessions
	93	18

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

2025 version of this symposium we have

URSI	Submitted Papers	Accepted Papers	Rejected Papers	Withdrawn Papers
B	191	180	2	9

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

2025 version of this symposium we have

URSI	Submitted Papers	Accepted Papers	Rejected Papers	Withdrawn Papers
B	191	180	2	9

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

2025 version of this symposium we have

URSI	Submitted Papers	Accepted Papers	Rejected Papers	Withdrawn Papers
B	191	180	2	9

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				

2025 version of this symposium we have

URSI	Submitted Papers	Accepted Papers	Rejected Papers	Withdrawn Papers
B	191	180	2	9

Special Sessions for National Radio Science Meeting 2027

- Please contact Tutku Karacolak (tutku.karacolak@wsu.edu) by March 2026 to organize a special session during NRSM 2027.
- 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 2026 in Detroit, Michigan and NRSM 2027 in Boulder.
- Email: tutku.karacolak@wsu.edu