

Physical Acoustics Technical Committee Meeting

Tuesday, May 14, 2024
Chair: Christopher Kube
kub@psu.edu



ChatGPT4/DALL-E Rendition of Physical Acoustics, 5/6/2024

All links in the slides have a unified QR

*This QR code will
appear on many slides*



Passcode: “pa” (all lowercase)

Agenda

- **Committee Reports**
- **Announcements, Awards, New Fellows**
- **Ottawa Special Sessions**
- **Future Meetings/Special Sessions**
- **Technical Council Business**
- **Publications**

Welcome, Attendance, and Introductions

- **Everyone sign in. The sign-in sheet is circulating**
 - Name
 - Institution
 - E-mail
- **Please indicate if you**
 - ... are a student and/or first-time attendee
 - ... want to be added to TC email list
- **New Attendee Introductions**
 - Name, organization, research area





Student Council Rep

TC: Physical Acoustics



Term: Fall 2023-Spring 2025

John (Jack) Case

Penn State

Graduate Program in Acoustics

Interested in joining Student Council?





Student Events

Monday

First-Time Attendee/Student Orientation (Room 203)

5:15 – 5:45 PM

~100 people attended!

Student Meet and Greet (Trillium Foyer)

5:45– 7:30 PM

~300 people attended!

Student Informal Outing (Level One Game Pub)

8:00 – 10:00 PM

~80 people attended!

Tuesday

Student Reception (Governor General Room I)

6:00– 7:30 PM

Springer book raffle, ASA Student merch





Join SONIC!

**Student Outreach for Networking
& Integrating Colleagues**

SONIC



Student Outreach for
Networking and Integrating Colleagues

Make connections as a **Newcomer!**
Help fellow students as a **Guide!**

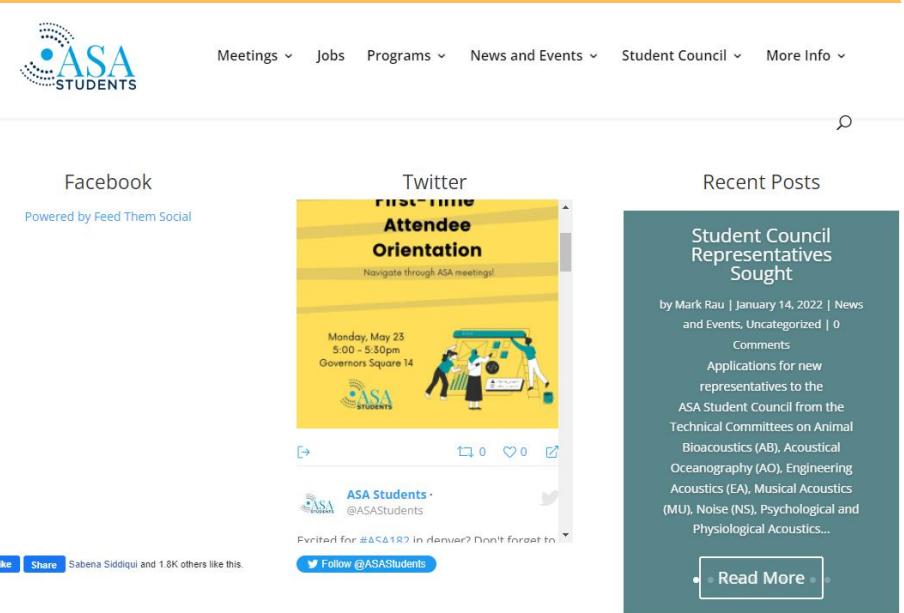
Info / sign-up:



**13 new
students signed
up for Ottawa!**

SONIC pairs first-time attendees with experienced students to help guide them through the ASA meeting and help with networking.

Checkout our website:
asastudents.org



CONTACT US



@students_ASA



@asastudents



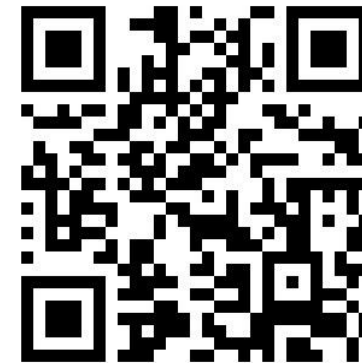
@ASAStudents



Acoustical Society of America Students



asastudentcouncil@gmail.com



NEW!



Administrative Committee Representative Reports

- **Medals and Awards** (Jay Maynard)
- **Standards** (ASACOS, Greg Lyons)
- **Web Committee** (Aaron Vaughn)
- **Membership** (Kent Gee)
- **CIRDI** (Feruza Amirkulova)

Updates?



Announcements – Push for Full Society Membership

- **Non-students are encouraged to apply for full membership.**
 - Associate member dues: \$150 for years 1-5, \$200 years 6+
 - Full members \$200/year
 - Access to JASA online, eligible for awards,
- **Nonmembers who become members at the meeting may receive a discount off the cost of membership dues (see 57.2). Ottawa registration fee: \$1050/nonmember, \$750/member**



Physical Acoustics Summer School

- 2-7 June, 2024, University of Mississippi, Oxford, MS, USA
- PASS brings together graduate students, distinguished lecturers and discussion leaders for a series of lectures and related activities over five days.
- Topics include Biomedical Ultrasound, Metamaterials, Bubbles and Drops, Atmospheric Acoustics, Infrasound, Nonlinear Acoustics, and Condensed Matter Acoustics
- Held every other year. This will be the 17th PASS since 1992.
- See <https://ncpa.olemiss.edu/pass-2024/>



New Fellows as of Fall 2023*



Michael Oelze

For contributions to quantitative ultrasonic tissue characterization



William C. Alberts, II

For contributions to tactical infrasound and battlefield acoustics

*with PA listed as primary or secondary area in ASA member directory OR present PATC member



New Fellows as of Fall 2023*



Ahmad T. Abawi

*For contributions to modeling underwater sound
propagation and scattering*



*with PA listed as primary or secondary area in ASA member directory OR present PATC member

Helmholtz-Rayleigh Interdisciplinary Silver Medal

in Computational Acoustics, Physical Acoustics, and Engineering Acoustics



D. Keith Wilson

...for contributions to computational acoustics, atmospheric acoustics, and national defense and security



R. BRUCE LINDSAY AWARD



Chris Kube

...for contributions to the understanding of ultrasonic propagation and nonlinearity in polycrystalline materials.



Ottawa PA Sessions

- 11 PA Sponsored Sessions Scheduled
- 10 Special sessions
- 104 presentations in special sessions
- 116 total presentations!

Ottawa PA Sessions

- **Developments and Applications in Phononic Crystals (8 Talks)**
 - S. Hales Swift, Matthew Guild
- **Cyber Threats and Acoustical Systems (8 Talks)**
 - Kavitha Chandra, Charles Thompson
- **Infrasound (14 Talks)**
 - Philip Blom, David Green
- **Wind Noise (9 Talks)**
 - Gregory Lyons, W.C. Alberts
- **Resonant Ultrasound Spectroscopy For Characterizing Material Property and Structure (13 Talks)**
 - Christopher Kube, Matthew Cherry, Rasheed Adebisi, Jeff Rosin

Updates, comments?



Ottawa PA Sessions

- **Meteorological Acoustics (11 Talks)**
 - Roger Waxler, Jelle Assink, Natalia Sidorovskaia
- **Characterization of Electronic Materials, Components, Devices, and Batteries (8 Talks)**
 - Michael Haberman, Bogdan-Ioan Popa, Haley Jones, Lauren Katch
- **Acousto-Optic Sensing (12 Talks)**
 - Carl Hart, Oleg Sapozhnikov, Yangfan Liu
- **Novel Methods and Applications in Nondestructive Evaluation (12 Talks)**
 - Luz Sotelo, Matthew Guild, Joseph Turner
- **Nonlinear Acoustics in Solids (9 Talks)**
 - John Cormack, Christopher Kube

Updates, comments?



Comments to take back to technical council
about Ottawa?



Future Meetings

Meeting Number	Details
187th	Virtual Meeting, Nov 18-22, 2024
*188th	Joint with the International Congress on Acoustics, New Orleans, Louisiana, May 19-23, 2025
189th	Joint with the Acoustical Society of Japan, Honolulu, Hawaii, 1-5 December 2025
190th	Philadelphia, Pennsylvania 11-15 May 2026

*Mark Hamilton (general chair), Joel Mobley (vice chair), Mike Haberman (technical co-chair), and Preston Wilson (technical co-chair)



Future Meetings (Virtual)

Meeting Number	Details
187 th	Online, Ether, Nov 18-22, 2024 Abstract Deadline: TBD (this week)

Session Name	Organizers
Frugal Acoustics	Luz Sotelo
Student Video Competition	Joseph Turner
Ask Me Anything	Christopher Kube
Hot Topics in Physical Acoustics	Andrea Arguelles, Lauren Katch
Acoustics at the Beamline	Ross Hrubiak, Blake Sturtevant

Future Meetings (Virtual)

Meeting Number	Details
187 th	Online, Ether, Nov 18-22, 2024 Abstract Deadline: TBD (this week)

- All presenters must pay a full registration (all session types)
Nov 18-22
- \$25 fee to enable "Watch Party" mode for non-presenter registrants
- Registration Fee (member/early bird) \$250
- No registration cost waiver for non-member invited speakers
- Abstract deadline TBD;
- Platform is "We & Goliath"



Future Meetings (New Orleans) - Need to Finalize

Meeting Number	Details	Number of Special Sessions (Currently)
*188 th	Joint with the International Congress on Acoustics, New Orleans, Louisiana, May 19-23, 2025	15

Session Name	Organizers
Session in Memoriam for Richard Raspet	Joel Mobley
That's Not Physics	Steven Garrett
Celebrating Steven Garrett's fifty years of contributions in Acoustics	David Brown
It's Not Physics	Steven Garrett
Acoustics of Fire: Modeling, Measurements, and Ecological Effects	Shane Lympany
Acoustic metamaterials for underwater applications	Nicole Kessissoglou
Viscothermal effects in phononic crystals and acoustic metamaterials	Jose Sanchez-Dehesa



Future Meetings (New Orleans) continued...

Session Name	Organizers
Acoustofluidics	James Friend
Acoustic holograms and wavefront modulation techniques	Noé Jiménez
Mesoscopics in Acoustics	John Yoritomo
Nonlinear Acoustic NDT	Mourad Bentahar
Meteorological Acoustics	Roger Waxler
Infrasound	Phil Blom
Nonlinear waves in architected solids	Vincent Tournat
Acoustic radiation force and its applications	Mohamed Ghanem

Future Meetings (Honolulu, Call for Sessions)

Meeting Number	Details
*189 th	Joint with the Acoustical Society of Japan, Honolulu, Hawaii, Dec 1-5, 2025

- Try to co-chair with Acoustical Society of Japan
 - Contact Prof. Kenji Yoshida (Chiba University), kenyoshi1980@chiba-u.jp for connecting with potential co-chairs (send session/topical details)



Publications

- Candidate for Acoustics Today editor being decided in Ottawa, to start CY2025
- Position for new Editor-in-Chief of JASA (to start CY2026) is open
- Special issues have been very important recently. Please continue to propose special issues and submit (see next slide for specifics)

Publications (Special Issues)

- Open calls available here: <https://pubs.aip.org/asa/jasa/pages/specialissues>
- Please let me know if you have any suggestions for future Special Issues!
- Also, if you have any ideas for topics/authors for other JASA special content like reviews and tutorials.

Other News

- ASA Academy, Michael Vorlander, Fundamentals/Short Course in development, template to be forwarded to TC, 5-8 years will have ASA Academy with school/academy principle with strong industry ties
- ASA School was very successful and in high demand (60 students out of 120 applicatns)



New business?





Scan for Any of the Links

Thanks!

