



**177th Meeting of the Acoustical Society of America
Galt House, Louisville, KY**

**Computational Acoustics TSG
Thursday, May 16, 2019
4:30 p.m. – 6:00 p.m.
Clements Room**

1. Happy 90th Anniversary to the ASA!

2. Students and new attendees

Introductions for all present. There were 29 participants, including five students and several from industry.

3. Is this a suitable meeting time?

Attendees concur that this is a suitable time.

4. **Please declare CA as your primary interest in the ASA membership directory or when you renew your membership.** To qualify as a TC, at least two percent of all Society members must declare CA as their primary interest. (That would be about 136 at this time.)

5. Publications

“Computational Acoustics” is a new JASA subject heading!!! Submit papers!

Need a volunteer for JASA Coordinating Editor for Computational Acoustics.

Art Popper has requested a technical overview of current topics of interest in CA for *Acoustics Today*. **Sheri Martinelli offered to help. Any other volunteers?**

“Reflections” will be a new monthly feature. 1-2 page description of a “classic” article up to year 2000. TCs furnish unbiased list of articles and potential authors. **Need volunteers** – small committee form each TC? (Don’t want senior members to dominate.)



6. ASA Strategic Summit in Tucson (Feb. 2019)...



Summit discussed strategic directions for the future, with focus on 2019-2022 time frame. Followed by Executive Council summit in Melville. Draft report was adopted by EC at this meeting. Will become available to membership soon. Boiled down to four strategic initiatives:

- A. Identification and promotion of emerging scientific/technical areas – give them a home in ASA.
- B. Better engagement with industry and practitioners.
- C. Improved communications and public relations (funding agencies, government, industry, academia, and society at large).
- D. Member engagement, particularly outside of meetings. How do we help all members, not just those who come to meetings regularly. Formed Member Engagement Committee.

The previous ASA task forces are concluding. May need representatives from each TC to participate in each of these four initiatives. Let me know.

7. General items from Technical Council meeting on Monday:

ASA is looking for volunteers – you can volunteer from link on the membership page on the ASA web site! (Or talk to me!)

The membership process has been streamlined and is now entirely electronic. Much easier to apply for full membership now.

ASA has adopted an app called “Stop It” to report harassment incidents at meetings.

8. Technical Initiatives:

Each TC has \$5K for technical initiatives. How do we want to use ours?

- Student Paper Awards (\$1000 total per Technical Committee per year) Young presenter award. (Ocean acoustics example?)

Ralph Muehleisen and Jennifer Cooper offered to : Suggestions included focusing on a young presenter award. Put the paper in POMA.

- Speaker Travel Funds (\$3000 total per Technical Committee per year, max amount per person \$1500)
- \$1000 other expenses in support of the TC

Michael Muhlestein suggested having student challenge problems.

9. Meetings and Special Sessions:

This meeting: 177th Louisville, Kentucky (Spring 2019) 13-17 May 2019

1073 registered attendees (as of Monday).

CA-sponsored special sessions (our first!):

Finite Difference Time Domain Method Across Acoustics
(Computational Acoustics joint with Biomedical Acoustics, Physical Acoustics, Underwater Acoustics, Signal Processing in Acoustics, Structural Acoustics and Vibration)
Organized by: Michelle Swearingen, Jennifer Cooper, Subha Maruvada

Uncertainty in Propagation Prediction
(Underwater Acoustics joint with Physical Acoustics, Structural Acoustics and Vibration, Acoustical Oceanography, Signal Processing in Acoustics, Computational Acoustics)
Organized by: Jennifer Cooper, D. Keith Wilson

Hot Topics in Computational Acoustics presentation:
Keith Wilson

Some of the comments on this meeting: Confusing hotel layout. Rooms are big enough. Physical coordination is good. Nonlinear and metamaterials sessions were overlapping. Screens small and projected with low resolution. Slide advancer low on batteries. No timer. Tall lectern, could not see presenter. New system for uploading worked very smoothly. Help chairs use presentation system. More accurate instructions for when and how to upload?

178th San Diego (Fall 2019) 2-6 Dec 2019
Meeting Postcard Mailed: 3 Jun 2019
Abstract Deadline: 8 Jul 2019
Hotel Del Coronado – nice location right on beach.

TPOM to be held by teleconference on August 15. Jennifer Cooper volunteered to represent CA.

CA-sponsored special sessions (all set):

K. Wu and K. Wilson, “Application of model reduction to computational acoustics”.
Description: Model reduction approaches for large, complex numerical models. The approaches may be based on physical insight or advanced numerical techniques.

J. Cooper and M. Swearingen, “Parabolic equation methods across acoustics.” Description:
Comparison of the use of parabolic equation methods in different areas in acoustics.

A. Bonomo et al., “Computational methods for mid-frequency structural acoustics”. (Joint with SA.)

L. Brill and M. Vorlander, “Computational applications for architectural acoustics”. (Joint with AA.)

A. Wall, “Supersonic jet aeroacoustics.” (Joint with Noise and PA.)

179th Chicago (Spring 2020) 11-15 May 2020
Preliminary Special Session Forms due by Friday this week

The Chicago meeting will have an ASA School immediately beforehand. Theme is “Living in the Acoustic Environment.” Near O’Hare Airport. Starting Friday night and then throughout weekend. There will be free transportation to the conference location afterwards.

Final special session forms due Friday. Even if you have already submitted a form indicating your intent to organize a special session, we still must submit the final form by the end of the week.

Proposed (and accepted!):

J. Cooper and M. Swearingen, “Ray methods across acoustics.”

K. Wu and R. Muehleisen, “Showcase of high-performance computing across acoustics.”

Micah Shepherd: “Acoustic Optimization”. Including benchmark problems. Technical initiative?

Ben Goldsberry and Anthony Bonomo, “Domain truncation techniques for exterior problems.”

[Added by Chair after meeting: CA is also co-sponsoring AO session on “The effects of ocean dynamics and seabed complexity on the mid-frequency inverse problem,” BA sessions on “Fractional calculus models of compressional and shear waves for medical ultrasound”, “Modelling and Measuring Nonlinear Ultrasound Signals”, MU session on “Computational Phonogram Archiving”, PA session on “Acoustic wave propagation through polydisperse scatterers”, PP session on “Machine Learning Approaches to Understanding Auditory Processing and Perception,” and SP sessions on “Knowledge discovery and information representation for signal processing in acoustics” and “Machine Learning in Acoustics.”]

180th Cancun (Fall 2020) 9-13 Nov 2020
Joint with Mexican Acoustical Society

No special session suggestions were put forward.

For your information:

181st Portland (tentative) (Spring 2021)

S. Martinelli and A. Wixom, “Verification and Validation”.

182nd Sydney, Australia (Fall 2021) 6-10 Dec 2021
183rd Denver

10. Meeting organization:

ASA is considering a policy for rejection of inappropriate abstracts. Attendees of the TSG were supportive of this. Some suggestions included clearly announce criteria, considering probability of attending the conference, and making the policy clear regarding commercialism.

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