

Structural Acoustics and Vibration Technical Committee

Open Meeting

172nd ASA Meeting in Honolulu, Hawaii

29 November 2016

7:30 p.m.

South Pacific I

Minutes

1. Call to Order at 7:37 pm
 - In attendance (20 people): Brian E. Anderson, Pegah Aslani, Ben Beck, Donald B. Bliss, David Feit, Tyler Flynn, Jerry H. Ginsberg, Matthew Guild, Sabih I. Hayek, Derke Hughes, Wonju Jeon, Robert M. Koch, Teik C. Lim, Elizabeth Magliula, James G. McDaniel, Allan D. Pierce, Mauro Pierucci, Scott D. Sommerfeldt, Earl G. Williams, Kuangcheng Wu
2. Honolulu Meeting Agenda (additions or other modifications)
No changes proposed
3. Approval of the 171st ASA Meeting Minutes from Salt Lake City, Utah
Approved without modification

Meetings

4. 171st Meeting, Salt Lake City, UT, 23-27 May, 2016
Scott Sommerfeldt & Kent Gee, Co-Chairs, Brian Anderson & Jon Blotter, Co-Technical Chairs

Winners of The Best Paper Awards for Students and Young Presenters for SAVTC at the 171st ASA Meeting in Salt Lake City:

1st Place

Peter Kerrian, Penn State University

The problem of the noisy golf club

2nd Place

Pegah Aslani, Brigham Young University

Experimental active control of cylindrical shells using the weighted sum of spatial gradients control metric

Thank you to Ben Shafer for organizing the student and young presenter paper awards in Salt Lake City.

5. 172nd Meeting, Honolulu, Hawaii, 28 November – 2 December, 2016
David Adams and Whitlow Au, Co-chairs

- a. 91 SAV papers total: 31 invited, 60 contributed (including 9 poster format)
 - Thank you to the following special session organizers: Benjamin Shafer, Christina Naify, Michael Haberman, Jeff Cipolla, Elizabeth Magliula, Andy Hull, Brian Anderson, Scott Sommerfeldt, James Phillips, Hasson Tavossi, Yoshihiro Hirao, Robert Koch, and Kuangcheng Wu
 - Are Hasson Tavossi and/or Yoshihiro Hirao still available to co-chair in James Phillips' absence for the 4aSA ('Building Vibes') special session?
Note: Hasson Tavossi was not in attendance at the TC Meeting. Robert Koch ultimately chaired the 4aSA Building Vibes special session in their absence.
 - Technical Program Organizer: Benjamin Shafer
 - Student and young presenter paper awards: Benjamin Shafer
 - There are **21** student and young presenter award contestants at this meeting
- b. Congratulations to our own Earl Williams for award of the 2016 TRENT-CREDE Medal!!
 - Please come support Earl at Thurs (~8:15PM) Plenary Session and Award Ceremony
 - Earl joins David Feit, Sabih Hayek, Jerry Ginsberg, ... as SAVTC awardees
- c. ASA's Students Meet Members for Lunch program
 - New approach led to large increase in number of interested students since Jacksonville (same as at Honolulu)
 - Recent calls out from David Blackstock requesting assistance
 - Member volunteer sign-up sheet to be passed around
Note: Volunteer Sign-up sheet was passed around the SA TC members in attendance.
- d. ASA broadcasting/recording 29 (up from 19) sessions, three TC Meetings (AB, NS, PP), and the 'Education In Acoustics' admin committee meeting at the Honolulu meeting
 - Represents 224 total papers (174 agreed to Live stream their talks)
 - Recordings available for two weeks to those who registered
 - Live streaming no longer tied to specific meeting rooms
 - Virtually no impact now on TPOM compared to SLC meeting and before!
 - TC Discussion Notes:
Not cost effective to hire crew/equipment?
Currently free for online viewers. Should an access fee be established?

6. 173rd Meeting/ “Acoustics ’17 Boston” Joint ASA/EAA meeting in Boston, MA, 25-29 June 2017

Damian Doria, ASA Chair, Robert Koch, ASA Technical Program Chair

a. **Final Special Sessions:**

Finalized in Salt Lake City and now coordinated with EAA co-chair counterparts.

- **Acoustic metamaterials:** Co-chairs, Christina Naify and Yun Jing (PA TC) (EAA co-chair Jose Sanchez-Dejesa from Valencia Polytechnic University)
- **Acoustics and vibration of sports and sports equipment:** Chair, Dan Russell
- **Novel techniques for nondestructive evaluation:** Co-chairs, Brian Anderson and Marcel Remillieux (EAA co-chair Sylvain Haupert)
- **Energy methods in structural acoustics and vibration:** Co-chairs, Don Bliss and Linda Franzoni (EAA co-chair Otto von Estorff)
- **Groundborne noise and vibration from transit systems:** Chair, James Phillips
- **Novel treatments in vibration damping:** Chair, Kenneth Cunefare (EAA co-chair Manuel Collet)
- **Numerical methods and benchmarking in computational acoustics:** Co-chairs, Robert Koch and Micah Sheperd (EAA co-chairs Manfred Kaltenbacher and Steffen Marburg)
- **Probabilistic finite element analysis and uncertainty quantification in vibroacoustic problems:** Chair, Micah Sheperd (EAA co-chair Kheirollah Sepahvand)

b. Student and young presenter paper awards: Benjamin Shafer

c. TPO: Robert Koch & Benjamin Shafer (Boston Virtual TPOM: 16 Feb 2017)

d. Notes on Boston Meeting:

- Boston meeting runs Sunday – Thursday (not the usual Monday-Friday) (thus our SAV TC meeting in Boston will be on that Monday evening)
- All papers 20 minutes in length (not usual 20 minutes Invited, 15 Contributed)
- Boston presentation start times are synchronized across all sessions (e.g., all papers start at 8AM, then 8:20AM, etc.)

e. Upcoming 2017 dates for the Boston TPOM:

- 11 November 2016: Call for Papers posted online
- 9 January 2017: Abstract deadline
- Dates TBD January: TPOs work with session organizers to make preliminary schedules for each session
- Dates TBD January: each TC submits their draft sessions schedules (preferred day/time, invited and contributing speakers in order)

- Dates TBD January: Tech Chair (Koch) with advisors, takes these and formulates the first draft meeting schedule in ScholarOne, iterating as needed with individual TPOs and session organizers.
- Dates TBD January: "pre-virtual TPOM meeting" - Tech Program Chair (Koch) meets more formally with other ASA/ & EAA Co-chairs of meeting and other advisors to finalize draft complete schedule and complete entry in ScholarOne by 13-14 February.
- 16 February 2017: the formal Virtual TPOM with all TPOs from ASA and EAA participating, Tech chair, meeting co-chairs, etc. Final product is the final Technical Program in ScholarOne. An "In-person" TPOM held at same time in Hynes Convention Center, including tour and handling/discussing/organizing other items; the ASA & EAA TPOs and others.

7. 174th Meeting, New Orleans, Louisiana, 4-8 December 2017

Joel Mobley, Chair, Natalia Sidorovskaya, Technical Chair

Scott Sommerfeldt & Kent Gee, Co-Chairs, Brian Anderson & Jon Blotter, Co-Technical Chairs

a. **Finalize** Special Sessions:

Must be finalized in Honolulu.

- Acoustic Metamaterials: Chair, Christina Naify
- Standards in structural acoustics and vibration: Chair, Benjamin Shafer (ASACOS Standards committee has agreed to co-sponsor the session)
- SAV applications of FEA, BEA, and SEA Computational Methods: Co-chairs, James Phillips and Elizabeth Magliula
- Active Control of Sound and Vibration Fields: Co-chairs, Scott D. Sommerfeldt and Jon D. Blotter

Note: Other than a small session title change made following the Honolulu SAVTC meeting, no changes/modifications were suggested/made to the above New Orleans sessions.

b. Technical Program Organizer: Benjamin Shafer

c. Student and young presenter paper awards: Benjamin Shafer

8. 175th Meeting, Minneapolis, Minnesota, 7-11 May, 2018

Peggy Nelson and Bruce Olson, Co-Chairs

a. **Preliminary** Special Sessions:

SAVTC must set Preliminary Special Sessions in Honolulu. Sessions must be finalized in Boston, June 2017.

- Metamaterials: Chair, Christina Naify
- Noise and vibration in rotating machinery: Chair, Robert Koch
- Education and Outreach in Structural Acoustics and Vibration: Chairs, Brian E. Anderson and Scott D. Sommerfeldt
- Model Reduction for Structural Acoustics, Vibration, and Noise/Analytical and computational techniques for model reduction. (Chair, Kuangcheng Wu)
- Applications of smart materials for acoustics and vibration (or something similar)?: Chair(s), ?? ??

Other Brainstormed Special Session Topic Ideas:

- Site Characterization (Earl Williams)
- NDE (theoretical) /Civil Infrastructure (application) (Jinying Zhu)
- History of a specific SAV technical area
- Thermoacoustic technology
- Vibration absorber technology
- Advances in SAV sensing and/or actuation
- Nanotechnology in SAV
- Novel damping treatments again
- Real-world case studies again
- SAV testing, in some respect
- others ?

b. TPO: Benjamin Shafer (Virtual TPOM in August 2017)

c. Student and young presenter paper awards: Benjamin Shafer

9. Future meetings:

176th Meeting, Victoria, British Columbia, Canada, 5-9 November 2018

177th Meeting, Louisville, Kentucky, 13-17 May, 2019

178th Meeting, TBD, Fall, 2019

179th Meeting, Chicago, Illinois, Spring, 2020

180th Meeting, Cancun, Mexico, Fall 2020

Note: ICA proposes 2019 to be The International Year of Sound

Reports

10. Topics from the Technical Council Meeting:

- ASA Strategic Leadership for the Future
 - Champions Meeting this Thursday, 1 Dec, 2-4PM, in Rainbow 1
 - Exec Council approved \$30,000 for ‘Early Career’ Conference Travel
 - Early Career defined as ≤ 10 years since last degree
 - ASA Strategic Plan has money behind it, not just ideas!

- Exec Council also approved \$300,000 fundraising goal to establish an endowment for ‘Early Career Leadership Fellows’ (two awards per year)
 - \$3,000 award + \$1,500 conference travel per awardee
 - Look for fundraising requests on this if interested
- Exec Council interested in capturing and documenting history of Technical Committees
 - Can be technical areas (e.g., recent History of Sonar special session)
 - Can be TC individuals
 - Can be TC history itself
- Exec Council considering increasing non-joint/standard ASA meeting registration
 - Been \$495 for many years
 - E.g., new costs ~\$525 (Note: Boston meeting , since joint, is \$575)
- JASA Editor-in-Chief Report shows a lot of initiatives are underway and coming:
 - Evaluation of Associate Editors (AE) complete → some changes as a result (As of date of Honolulu meeting, there were 8 Associate Editors from SA TC)
 - Creation of new “Coordinating Editor” position
 - Initially tested with 5 larger TCs (un-named)
 - One coming for SAVTC as well. Per JASA EIC, candidates need to:
 - be reliable
 - have a strong overview of topics and SAVTC AE personnel
 - Speed-up demonstrated in the JASA Peer Review Process (100d→59d)
 - JASA EIC seeking the following from each of the TCs:
 - Appropriate AE staffing needs (e.g., are there technical specialties that need coverage?)
 - “Special Content” articles/Issues recommendations (FREE access!)
 - List of competitor journals for each TC to compare metrics
 - Photograph/Image that characterizes the TC for AIP
 - Should be current and eye-catching
 - Can/should be updated on a regular basis.
- Revised Technical Initiatives
 - Recall, for 2017 (Boston meeting), TC Council voted for an extra \$3K per TC budgeted for Invited Speaker travel

11. Report from Student Council: Tyler “TJ” Flynn (This is TJ’s first ASA meeting as the SAV TC Student Council Rep, Thanks again to outgoing Matt Kamrath!)

- Student Events: New Student Orientation – 89 attendees
Student Meet & Greet – 140+ attendees!
Student Reception
Resume Help Desk
 - Members are encouraged to attend student events in Boston
- Students Meet Members for Lunch (SMMfL)
 - Great student turnout (104 matches), need more ASA Member volunteers
 - A SMMfL sign-up sheet was passed around at the SAVTC Meeting
- Student Travel Funds are available.
 - Extra funding was provided for Honolulu.
 - 151 travel subsidy applications were received, 13 were awarded (one per TC).

- Mentor Award Selected – Dan Russell (Congrats!)
 - To be presented at Boston.
- New event to begin at Boston: Teaching Tips for the New (or not so new) Acoustics Faculty Member (co-sponsored with EdCom)
- Graduate Programs in Acoustics Poster Session to take place in Boston, Spring 2017.
 - This is the second session, after great success with the first.
 - Need more/new posters!
 - A request was made for posters from members at universities with an acoustics program. Abstract deadline for Boston Posters: January 9th
- Upkeep of Web Presence
 - Website (asastudentcouncil.org), Facebook, Twitter, LinkedIn (800+,400+,50+ followers)
 - Send post-doc, job, or event information to student rep, T.J. Flynn, to be posted to the website
 - We will advertise for other conferences, etc. outside of ASA

12. Report from Medals and Awards Committee: James Phillips (relieved Sabih Hayek as SAVTC rep for trial run through ASA Spring 2017 meeting)

- James Phillips unable to attend Honolulu Meeting due to last minute medical issue
- Need a replacement SAVTC rep for Medals and Awards Meeting. Any volunteer?
 - (Meeting occurs on Wednesday at 11:00AM in Ilima Boardroom)
 Note: Robert Koch volunteered to replace James Phillips for SAVTC rep at Medals and Awards Meeting

13. Report from Membership Committee: TBD

- Kai Ming Li stepping down as rep, need to find new Fellow rep!
- Need a replacement Fellow SAVTC rep for Membership Meeting. Any volunteer?
 - (Meeting occurs on Wednesday at 12:00PM in Iolani 4)
- Note: Sabih Hayek volunteered to serve as SAVTC rep at Membership Meeting

14. ASACOS: Robert Koch

- New Acoustic Terminology Standards are out and available on the ASASTandards.org website

15. Report from new SAVTC Liaison to Education in Acoustics TC: T.J. Flynn sat-in (Matthew Kamrath unable to attend Honolulu meeting)

- A new, full-time Education and Outreach Coordinator, an ASA staff member, has been hired: Keeta Jones!
- See Meeting Program, Call for Papers, and EdCom Website <asaedcom.org> for regularly occurring EdCom initiatives
 - Listen Up and Get Involved (Girl-Scout Session)
 - Hands-On Acoustics Demonstrations for Middle-School Students
 - Undergraduate Research Exposition
 - Rossing Prize in Acoustics Education
 - Acoustics Graduate Program Database

- SMMfL (Students Meet Members for Lunch)
 - Need a larger pool of volunteers to host student lunches, please consider checking the box when you register for Boston!
- Stronger connection to all TCs
 - Actively seeking new EdCom members from all TCs.
- TF1: EdCom to form subcommittee on Massive Open Online Courses (MOOCs)
- Robert W. Young Award for undergrad student research
 - \$500 for semester long project and report
- Website: asaedcom.org
 - \$600 motion for website redesign – passed.
- Explore Sound website redesign
 - More interactive activities
 - Teacher Activity Kit request form make ordering much easier.
- Booths Initiative
 - Organize ASA booths at popular student-focused science conventions and events for outreach
 - Show acoustics demos and give away acoustics themed toys/tools like sonic rocks, contact speakers.
 - PhysCon booth in 2016 was very successful
 - \$9800 motion for booth at Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) meeting in Salt Lake City, October 2017 – passed.
- Teaching Activity Kit
 - \$30,000 motion for activity kits – passed.
 - Typically \$20,000 per year; new ordering system increases demand
- Undergrad Poster Competition
 - \$2000 motion for 4x \$500 student prizes – passed.

16. Report on SAVTC webpage update - Brian Anderson

- Recall Brian funded by SAVTC Web Maintenance Technical Initiative (\$500 per year for 2016 and 2017)
- We need more SAV website content

Brian Anderson manages SAVTC webpage. What updates are necessary? Any suggestions.

Group picture for website?

17. SAVTC Published SAV TC Report in Fall 2016 issue of ‘Acoustics Today’

- Intent was to discuss SAV TC’s purpose and interests, and careers in SAV
- Article covered both science and “how people come to the field”
- Authors: Christina Naify, Robert Koch

18. Technical Initiatives for 2017

- None proposed

19. New Business

20. Adjourn (Meeting adjourned just before 9:00PM)