Announcement and Call for Papers

169th MEETING OF THE ACOUSTICAL SOCIETY OF AMERICA

Wyndham Grand Pittsburgh Downtown Hotel
Pittsburgh, Pennsylvania
18–22 May 2015

Deadline for receipt of abstracts: 12 January 2015
The 169th Meeting of the Acoustical Society of America will be held Monday through Friday, 18–22 May 2015 at the Wyndham Grand Pittsburgh Downtown Hotel, Pittsburgh, Pennsylvania, USA. A block of rooms has been reserved at the Wyndham Grand Pittsburgh Downtown Hotel at special ASA rates.

Information about the meeting also appears on the ASA webpage at www.AcousticalSociety.org. See page 17 for registration information.

The deadline for receipt of abstracts is 12 January 2015. This deadline will be strictly enforced.

Susan E. Fox
Executive Director
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TECHNICAL PROGRAM AND SPECIAL SESSIONS

TECHNICAL PROGRAM

Contributed papers are welcome in all branches of acoustics. The technical program will consist of lecture and poster sessions. Technical sessions will be scheduled Monday through Friday, 18–22 May.

Every effort will be made to schedule contributed abstracts in accordance with author and Technical Committee preferences. However, authors should be prepared to accept assignment to poster sessions. Assignments will take into account: a) author preference, b) program balance, and c) Technical Committee instructions. Abstracts will be rejected if they do not comply with the instructions.

The special sessions described below will be organized by the Technical Program Committee. Authors of invited papers must indicate the title of the special session in which they have been invited to participate when the abstract is submitted. Authors of contributed papers have the option to request placement of their abstracts in these sessions. If no special session placement is requested, contributed papers will be scheduled in sessions with abstracts of similar technical content.

SPECIAL SESSIONS, ORGANIZERS, AND DESCRIPTIVE SENTENCES

ACOUSTICAL OCEANOGRAPHY (AO)

Acoustics of Fine Grained Sediments: Theory and Measurements
(Joint with Underwater Acoustics)
Organized by: David P. Knobles, Mohsen Badiey, Charles W. Holland

DESCRIPTIVE SENTENCES

Current knowledge base on mud sediments that occur in both shallow and deep ocean environments. Submission of experimental and theoretical results are encouraged

ANIMAL BIOACOUSTICS (AB)

Audio Playback in Animal Bioacoustics
Organized by: Benjamin N. Taft

Auditory Scene Analysis in Natural Environments
(Joint with Psychological and Physiological Acoustics)
Organized by: Annemarie Surlykke, Susan L. Denham

DESCRIPTIVE SENTENCES

One of the most productive ways to study animal communication is to ask the animals themselves with playback experiments

Auditory Scene Analysis in Natural Environments
(Joint with Psychological and Physiological Acoustics)
Organized by: Annemarie Surlykke, Susan L. Denham

DESCRIPTIVE SENTENCES

Challenges in the complex natural environment to the simple lab

ARCHITECTURAL ACOUSTICS (AA)

Public Policy Implementation of School Acoustics
(Joint with ASA Committee on Standards and Noise)
Organized by: Jason E. Summers

Sixty-Fifth Anniversary of Noise and Health: Session in Honor of Karl Kryter
(Joint with Noise, Speech Communication, and Psychological and Physiological Acoustics)
Organized by: Kenric D. Van Wyk, David Sykes, William J. Cavanaugh

Session in Honor of Dick Campbell
(Joint with Noise)
Organized by: K. Anthony Hoover, Eric L. Reuter

Session in Honor of Laymon Miller
(Joint with Noise and Structural Acoustics and Vibration)
Organized by: Neil Thompson Shade, Bennett C. Brooks

Spherical Array Processing for Architectural Acoustics
(Joint with Noise and Signal Processing in Acoustics)
Organized by: Michael Vorländer, Ning Xiang

DESCRIPTIVE SENTENCES

Interface of classroom acoustics with public policy initiatives in school reform and student achievement

Marks the re-emergence in the U.S. of noise and health as an area of epidemiological and clinical inquiry after thirty years of neglect. It celebrates the publication, sixty-five years ago, of Karl Kryter’s landmark text *The Effects of Noise on Man*

Honoring the work and contributions of Dick Campbell to the acoustics community

Honoring the contributions of Laymon Miller to the noise and acoustics consulting community

Recent advances in array signal processing for application in architectural acoustics. Challenges and opportunities in application of spatial decompositions for evaluation of rooms
ARCHITECTURAL ACOUSTICS (AA) (cont)

Uncertainty in Laboratory Building Acoustics Measurements (Joint with Noise)
Organized by: Matthew V. Golden

Up and Coming Architectural Acousticians: Past Student Paper Award Winners Report
Organized by: David T. Bradley, Lauren M. Ronsse

Uses, Measurements, and Advances in the Use of Diffusion and Scattering Devices
Organized by: Ron Sauro

BIOMEDICAL ACOUSTICS (BA)

Acoustic Radiation Force in Biomedical Applications
Organized by: Matthew W. Urban, Mostafa Fatemi

Biomedical Acoustics Best Student Paper Competition
Organized by: Kevin J. Haworth

Ultrasonic Characterization of Bone
Organized by: Keith A. Wear

Ultrasound Contrast Agents: Molecular Imaging Applications
Organized by: Tyrone M. Porter, Jonathan A. Kopechek

Ultrasound Contrast Agents: Nonlinear Bubble Dynamics
Organized by: Tyrone M. Porter, Jonathan A. Kopechek

ENGINEERING ACOUSTICS (EA)

Funding Opportunities with the NSF (Joint with Physical Acoustics)
Organized by: Allan D. Pierce

EDUCATION IN ACOUSTICS (ED)

Expanding Acoustics Outreach with Social Media (Joint with Public Relations and Student Council)
Organized by: Andrew A. Piacsek, Andrew C. Morrison

Hands-On Acoustics Demonstrations for Middle- and High-School Students
Organized by: Cameron Vongsawad, Kent L. Gee

Listen Up and Get Involved (Joint with Women in Acoustics)
Organized by: Tracianne B. Neilson, Cameron Vongsawad

Preparing Graduate Students for Careers in Acoustics (Joint with Physical Acoustics)
Organized by: Daniel A. Russell, E. Carr Everbach

DESCRIPTIVE SENTENCES

Uncertainty, reproducibility and repeatability in laboratory building acoustics standards: A critical look at ASTM E90

Winners of Student Paper Awards in architectural acoustics report on their current activities

How diffusion and scattering is designed, used and measured in today's world

Use of acoustic radiation force in biomedical ultrasound applications including but not limited to modeling and simulations, medical imaging, visco-elasticity tissue characterization, and manipulation of materials or tissue with acoustic radiation force

Annual student competition sponsored by the Biomedical Acoustics Technical Committee. See page 21

Explore the interaction between ultrasound and bone

Development, characterization, and utilization of targeted ultrasound contrast agents and novel imaging techniques (i.e., pulsing schemes, image processing) for molecular imaging applications

Theoretical and experimental studies of nonlinear bubble oscillations and associated acoustic emissions (subharmonic, superharmonics, etc.), acquisition/detection, and image reconstruction

Scope of the programs at the National Science Foundation is reviewed with special emphasis on those programs of interest to workers in acoustics

Forum on the effective use of social media, such as Twitter and Facebook, for rapid sharing of information and promotion of acoustics to the public. Invited and contributed talks will be followed by a panel discussion

Acoustics demonstrations for middle-school students. No abstracts should be submitted. Any acousticians wanting to participate should send an e-mail message to Cameron Vongsawad at cvongsawad@gmail.com

Acoustic demonstrations for middle- and high-school aged Girl Scouts

Abstracts related to preparing graduate students for careers in academia
MUSICAL ACOUSTICS (MU)

Acoustics of Percussion Instruments
Organized by: Christopher M. Jasinski, Andrew C.H. Morrison

Non-Western Musical Instruments and Performance Spaces
Organized by: Jonas Braasch

DESCRIPTIVE SENTENCES

Recent work related to the science and engineering of percussion instruments

Our current knowledge of acoustical requirements for music spaces predominantly stems from experiments for 19th century concert-hall scenarios. Session will focus on how these requirements are affected for non-western genres of music

NOISE (NS)

Active Control of Sound and Vibration
(Joint with Structural Acoustics and Vibration)
Organized by: Scott D. Sommerfeldt, Pegah Aslani

Application of Psychoacoustics in Noise
(Joint with Psychological and Physiological Acoustics)
Organized by: Klaus Genuit, Brigitte Schulte-Fortkamp

Mobile Technology Solutions for Hearing Loss Prevention
(Joint with Psychological and Physiological Acoustics)
Organized by: William J. Murphy, Michael G. Heinz

Noise, Soundscape, and Health
(Joint with Psychological and Physiological Acoustics and ASA Committee on Standards)
Organized by: Brigitte Schulte-Fortkamp, Klaus Genuit

Noise with Tonal Components in the Built Environment
(Joint with Architectural Acoustics and ASA Committee on Standards)
Organized by: Lily M. Wang

Session in Honor of Alan H. Marsh
(Joint with ASA Committee on Standards)
Organized by: Paul D. Schomer, Louis C. Sutherland

Session in Honor of Louis C. Sutherland
(Joint with ASA Committee on Standards)
Organized by: David Lubman, Brigitte Schulte-Fortkamp

Wind Turbine Noise
(Joint with ASA Committee on Standards, Psychological and Physiological Acoustics, Physical Acoustics, and Structural Acoustics and Vibration)
Organized by: Nancy S. Timmerman, Paul D. Schomer

PHYSICAL ACOUSTICS (PA)

Acoustofluidics: Interaction of Acoustics and Fluid Dynamic Phenomena
Organized by: Charles Thompson, Max Denis

Infrasound
Organized by: Roger M. Waxler

Wind Noise Mitigation in Atmospheric Acoustics
Organized by: W.C. Kirkpatrick Alberts, II

DESCRIPTIVE SENTENCES

Recent developments in active control methods and their implementation

Besides the A-weighted level, psychoacoustics can provide additional information for better understanding of noise problems. Special focus will be on transportation noise, electric vehicles, and others

Effective hearing loss prevention requires assessment and control of noise exposures, evaluation, and monitoring of persons’ hearing, education, and motivation of those who are exposed. Session will investigate how mobile applications are used to measure noise exposures, and how they can be used to inform users about healthy hearing habits

Establishing valid and reliable descriptors of the effect in soundscape research to enhance understanding of positive and adverse impacts on perceptive and physical levels of observations

Recent research, approaches, standards, and case studies dealing with noise that has prominent tonal components in the built environment

Honoring the contributions of Alan Marsh

Louis C. Sutherland’s lifetime contributions to the field of noise, standardization, and classroom acoustics are reviewed

Focus on wind turbine noise and effects and research needs

Relationship between unsteady motion driven by acoustic disturbances and transport phenomena, i.e., heat transfer, mass transfer, etc

Infrasound signal detection, analysis, propagation, and generation

Mechanical and signal processing approaches to wind noise mitigation
PSYCHOLOGICAL AND PHYSIOLOGICAL ACOUSTICS (PP)

Celebration of the Modern Cochlear Implant and the First Substantial Restoration of a Human Sense Using a Medical Intervention (Joint with Biomedical Acoustics, Speech Communication, and Signal Processing in Acoustics)
Organized by: Blake S. Wilson, Michael F. Dorman

Influence of Visual Cues on Auditory Perception (Joint with Speech Communication)
Organized by: Jonas Braasch

Kinematic Hearing: Auditory Perception of Moving Sounds by Moving Listeners (Joint with Psychological and Physiological Acoustics and Animal Bioacoustics)
Organized by: Owen Brimjoin, Cynthia Moss, Michael A. Akeroyd

SIGNAL PROCESSING IN ACOUSTICS (SP)

Cognitive Signal Processing (Joint with Psychological and Physiological Acoustics)
Organized by: Grace A. Clark

Instrumentation, Measurement and Analysis in Human Sound Production (Joint with Speech Communication)
Organized by: Xiao Perdereau, Daniel Fogerty

Telecom and Audio Signal Processing (Joint with Architectural Acoustics and Noise)
Organized by: Mingsian Bai

SPEECH COMMUNICATION (SC)

Celebration of Kenneth N. Stevens Contributions to Speech Communication: Past, Present, Future
Organized by: Helen M. Hanson, Stefanie R. Shattuck-Hufnagel

Listening Effort (Joint with Psychological and Physiological Acoustics)
Organized by: Alexander L. Francis, Christian Füllgrabe

STRUCTURAL ACOUSTICS AND VIBRATION (SA)

Acoustic Metamaterials (Joint with Physical Acoustics and Engineering Acoustics)
Organized by: Christina Naify, Michael R. Haberman

Blind Source Localization and Separation for Structural Acoustic Sources (Joint with Noise and Signal Processing in Acoustics)
Organized by: Sean F. Wu

Demonstrations of Structural Acoustics and Vibration (Joint with Education in Acoustics and Physical Acoustics)
Organized by: Daniel A. Russell

General Topics in Structural Acoustics and Vibration
Organized by: Kuangcheng Wu

DESCRIPTIVE SENTENCES

Major steps forward that led to the modern cochlear implant

It is well known that visual cues can influence auditory perception (e.g., ventriloquism effect for spatial localization, McGurk Effect on speech perception). New findings will be presented and discussed.

Recent advances in motion-tracking technology have directly led to dramatic advances in understanding how people and animals move when listening, and how the actual sounds they hear dynamically change because of their movements. Researchers will report their latest findings and discuss new developments.

Signal processing algorithms that include (1) Learning and awareness through interactions with the environment and (2) A dynamic closed feedback loop that encompasses the transmitter, environment and receiver; allowing the transmitter to adjust its illumination of the environment intelligently so as to improve system performance

Experimental investigation of current signal analysis and processing techniques for indexing highly informative spectral-temporal properties for speech recognition and identification

Issues concerning echo cancellation, noise reduction, spatial audio reproduction, special audio effects etc.

Ken's career spanned over 50 years, and his accomplishments covered many aspects of Speech Communication. In this session we put Ken's work in the contexts of what he accomplished, how it is being used now, and where it will lead us

Physiological and behavioral methods of quantifying listening effort. Research on the effects of listening effort in clinical treatment efficacy and identification of sources and consequences of increased listening effort across listening conditions and listener groups

Investigation of acoustic metamaterials and devices using analytical and experimental methods

Methods of blind source localization and separation for structural acoustic sources

Demonstration apparatus for teaching acoustics and outreach that specifically involves structural acoustics and vibration phenomena

Variety of topics on structural acoustics and vibration
STRUCTURAL ACOUSTICS AND VIBRATION (SA) (cont)

Noise Identification and Control in the Mining Industry  
(Joint with Noise)  
Organized by: Marcel C. Remillieux, Hugo Elias Camargo

Time-Domain Methods  
(Joint with Signal Processing in Acoustics)  
Organized by: Micah Shepherd, John B. Fahnline

UNDERWATER ACOUSTICS (UW)

Historical Perspectives on the Origins of Underwater Acoustics  
Organized by: David L. Bradley, Thomas G. Muir

Three-Dimensional Undewater Acoustics Models and Experiments  
Organized by: Ying-Tsong Lin, Marcia J. Isakson

DESCRIPTIVE SENTENCES

Techniques and apparatus for identification and mitigation of noise generated during mining operations with the long-term goal of preventing hearing loss

Advanced numerical procedures using time-domain or hybrid time-frequency domain methods for predicting transient behavior of structural-acoustic systems

OTHER TECHNICAL EVENTS AND INFORMATION

OPEN MEETINGS OF TECHNICAL COMMITTEES

Technical Committees will hold open meetings on Tuesday, Wednesday, and Thursday evenings. These are working, collegial meetings. Much of the work of the Society is accomplished by actions that originate and are taken in these meetings including proposals for special sessions, workshops, and technical initiatives. All meeting participants are cordially invited to attend these meetings and to participate actively in the discussions.

HOT TOPICS

A “Hot Topics” session sponsored by the Tutorials Committee will cover the fields of Noise, Physical Acoustics, and Speech Communication.

STUDENT DESIGN COMPETITION

The 2015 Student Design Competition will be displayed and judged at the Pittsburgh meeting. This competition is intended to encourage students in the disciplines of architecture, engineering, physics, and other curricula that involve building design and/or acoustics to express their knowledge of architectural acoustics and noise control in the design of a facility in which acoustical considerations are of significant importance. The competition will be a poster session. Entries may be submitted by individual students or by teams of a maximum of three students. Undergraduate and graduate students from all countries are encouraged to participate. Students must be enrolled in either the fall term of 2014 or the spring term of 2015 (or equivalent if a particular school does not operate on a spring and fall term basis) to be eligible for the competition. It is not necessary to attend the Pittsburgh meeting to participate in the competition, although attending the meeting is encouraged.

All competition entries will respond to a design scenario that will be announced by approximately 1 December 2014.

Information about the design scenario and registration for the competition will be available on the website of the Newman Fund, www.newmanfund.org. Additional information may be obtained by contacting Norman Philipp <nphilipp@pittstate.edu>.

The Student Design Competition is sponsored by the ASA Technical Committee on Architectural Acoustics, with support from the Wenger Foundation, the Robert Bradford Newman Student Award Fund, and the National Council of Acoustical Consultants.
SMARTPHONE ACOUSTIC SIGNAL PROCESSING STUDENT COMPETITION

The ASA Technical Committee on Signal Processing in Acoustics is sponsoring a competition for students to develop concepts for smartphone applications (“apps”) that make novel use acoustic signal processing.

Each entrant will present a poster describing their smartphone app concept during a session dedicated to the competition at the 169th meeting of the ASA in Pittsburgh, Pennsylvania. A panel of volunteer judges will judge each entry on the following equally-weighted criteria: novelty, feasibility of implementation, technical rigor, and how well the concept is presented.

Cash prizes for top 3 entries of $1000, $500, and $300 per team will be awarded.

It is not expected that teams will develop a fully functioning app, but rather a poster describing the concept for an app. In previous years some teams have used a smartphone or tablet with mock screen-shots or an app prototype to better illustrate how their app would operate.

Examples of previous entries include: an app that asks the user to draw out the shape of his or her living room and then suggests optimal speaker placement, an app that used audible signals emitted from the smartphone speaker to estimate inter-smartphone distances and geometry, and an app that aimed to assess the integrity of speech production for the purposes of providing an augmentative tool for telemedicine.

Undergraduate and graduate students from all countries are encouraged to participate.

Deadline and Other Requirements:

• Entries may be submitted by individual students or by teams of a maximum of three students.
• Team must register by April 13th, 2015, by e-mailing Kevin Cockrell at kevincockrell@gmail.com with the names and email addresses of the team members and their schools, indicating which team member will serve as the primary contact for the team.
• All team members must be enrolled as a student at least half-time.
• Team member do not need to be members of the ASA.
• The goal of the competition is not to simply wrap a funded research project inside of an app, but rather to encourage signal processed techniques studied within the ASA to be applied to novel situations. Therefore it is required that teams disclose what portion of the app (if any) was developed using outside funding so that judges may take that into account.
• The poster must include a short description of how the proposed smartphone application differs from existing applications found on Apple’s App Store or Google Play.
• The poster format should follow the format found in the ASA call for papers.
• Winning entries from previous years cannot be resubmitted.
• Students retain the right to publish and distribute any apps built in conjunction with this competition.

PENNSYLVANIA STATE ACOUSTICS 50TH ANNIVERSARY RECEPTION AND DINNER

The Penn State Graduate Program in Acoustics is celebrating its 50th Anniversary in 2015, and Penn State is sponsoring a Celebration Reception and Dinner on the evening of Wednesday, 20 May in conjunction with the Pittsburgh ASA meeting. All ASA meeting attendees who self-identify as current or former faculty members, students, alumni, or friends of the Penn State Acoustics Program, and their accompanying persons, are welcome to attend. Although the event will be substantially underwritten by Penn State, there is a nominal charge for the dinner. ASA attendees may pay the fee for the dinner at the time of their ASA registration. There will be a separate registration mechanism for current Penn State students, and they should direct their inquiries directly to the Penn State Acoustics Program offices. For more information, please contact Mrs. Karen J. Thal at (814) 865-6364 or kjt3@psu.edu. Additional details will be available in Spring 2015 at www.acs.psu.edu. Please come join us for this special 50th Anniversary Celebration. We are ... Penn State! Purchase tickets for the dinner online at <http://AcousticalSociety.org> or use the form on page 18.
TECHNICAL TOURS

A walking tour of various Performing Arts spaces such as the Benedum Center, Heinz Hall, O’Reilly Theatre, with additions to be announced, will be held on Monday, 18 May 2015, 5:30 p.m. to 7:30 p.m. The tour will be led by Christopher M. Evans, House Sound Engineer, Benedum Center. Space is limited to 30 participants. Cost is USD $15.00. The tour will meet in the hotel first floor lobby at 1:15 p.m. for the 0.5 mi walk to the Benedum Center. Full mobility is required as some of the spaces rear entrances and exits are not handicapped accessible. Register online at http://AcousticalSociety.org or use the form on page 18.

The National Aviary is America’s only independent indoor nonprofit zoo dedicated to birds. The Aviary’s collection features birds representing every continent except Antarctica. Many of these species are showcased in free-flight mixed species exhibits, to allow the birds to demonstrate natural behaviors. Avian expert, Dave Miller, will present his research on flamingo vocalizations and behavioral responses to auditory stimuli and provide an onsite demonstration. Dave will then lead a private tour of the facility, focusing on vocalizations of the Aviary’s unparalleled collection of bird species. Participants may bring small recording devices to capture an exceptional array of unique bird calls. The tour will take place on Wednesday, 20 May, 9:00 a.m. to 11:30 a.m. (leave aviary to return to hotel). Space is limited to 30 participants. Cost is USD $40.00 and includes transportation. Register online at AcousticalSociety.org or use the form on page 18.

RESUME HELP DESK

Are you interested in applying for graduate school, a postdoctoral opportunity, a research scientist position, a faculty opening, or other position involving acoustics? If you are, please stop by the ASA Resume Help Desk near the meeting registration booths. Members of the ASA experienced in hiring will be available to look at your CV, cover letter, and research & teaching statements to provide tips and suggestions to help you most effectively present yourself in today's competitive job market. The ASA Resume Help Desk will be staffed on Tuesday, Wednesday, and Thursday during the lunch hour for walk-up meetings. Appointments during these three lunch hours will be available via a sign-up sheet, too.

PROCEEDINGS OF MEETINGS ON ACOUSTICS (POMA)

Any paper presented at this meeting is eligible for subsequent publication, without charge, in the "Proceedings of Meetings on Acoustics" (POMA). This is an open-access journal dedicated to the publication of papers previously presented at ASA meetings and some selected co-sponsored meetings. Its articles are available in pdf format without charge to anyone in the world. Beginning with 2015, there will be one volume of POMA published per year, and anyone who has presented a paper at any ASA meeting in the past can submit a paper corresponding to that presentation to POMA. Further information concerning submission to POMA can be found at the online site http://acousticsauthors.org/POMA.

ITINERARY PLANNER AND MOBILE APP

An itinerary planner and mobile app will be available for the Providence meeting.

MEETING PROGRAM

A complete meeting program will be mailed as Part 2 of the April issue of JASA. Abstracts will be available on the ASA webpage http://AcousticalSociety.org in March.
ABSTRACT SUBMISSION GUIDELINES

An abstract of not more than 200 words is required for each paper, whether invited or contributed. Abstracts longer than 200 words will be edited or truncated. Authors must submit abstracts online (see page 19).

ABSTRACT SUBMISSION GUIDELINES

All abstracts must be submitted online by 12 January 2015. This deadline will be strictly enforced. Abstracts submitted via postal mail, fax, or e-mail will not be accepted.

ABSTRACT LIMITATIONS

- A contributor in Speech Communication may be the principal author of only one paper, and, subject to time and space limitations, may be the co-author of only one additional paper. Authors contributing papers in Speech Communication are also encouraged to select poster-style presentation.

- Contributed papers in Psychological and Physiological Acoustics and Underwater Acoustics may be scheduled for lecture or poster presentation.

- While authors may indicate a preference for presentation style, it may not always be possible to honor the request. Authors should be prepared to accept assignment of their abstracts to either lecture or poster presentation.

ACKNOWLEDGMENT OF RECEIPT OF ABSTRACTS SUBMITTED ONLINE

Contributors submitting abstracts online will receive an e-mail message confirming that their abstracts have been received. Acceptance notices will be sent to authors by e-mail in March.

BEST PAPER AWARDS FOR STUDENTS AND YOUNG PRESENTERS

The ASA Technical Committees on Acoustical Oceanography, Animal Bioacoustics, Architectural Acoustics, Biomedical Acoustics (Spring meeting only), Engineering Acoustics, Musical Acoustics, Noise, Signal Processing in Acoustics, Speech Communication (posters only), Structural Acoustics and Vibration, and Underwater Acoustics offer Best Paper Awards to students or young presenters who present papers at Society meetings. Authors need not be members of ASA to qualify. If you want your paper to be considered for an award, you must indicate this when you submit your abstract. Please read the entry qualifications to be sure that you are eligible and follow the instructions for entering the individual Technical Committee competitions that appears on pages 20 and 21.
PC computers with monaural audio playback capability, computer projectors, and laser pointers will be provided in all lecture sessions. All other equipment is considered to be special equipment. Refer to the “Special Equipment” section below for additional information. Note that Mac computers will not be provided.

Any equipment other than PC computers with monaural audio playback capability, computer projectors, and laser pointers is “special equipment.” Requests for special equipment (e.g., CD players, stereo sound) must be specified at the time of abstract submission. Provision of unusual special equipment will depend upon availability and cost. Special software requests should also be made, if required.

Please be specific about your audio needs, including number of channels and preferred loudspeaker arrangement.

A PC computer with playback capability and projector will be provided in each meeting room on which all authors who plan to use computer projection will load their presentations. Authors should bring computer presentations on a USB drive to load onto the provided computer and should arrive at the meeting rooms at least 30 minutes before the start of their sessions. Authors also have the option to connect their own laptops to the computer projector, however authors using their own laptops must also arrive at the meeting room at least 30 minutes before start of the session to setup this connection. Assistance in loading presentations onto the computers and switching to alternate computers will be provided.

If you utilize your own computer for your presentation you should bring copies of your presentation materials on a USB drive as a backup. This may solve any possible interface or cable problems between your computer and the projector.

Note that only PC format will be supported so authors using Macs must save their presentations for projection in PC format. Also, authors who plan to play audio during their presentations should insure that their sound files are also saved on the USB drive.

Guidelines for use of computer projection will be supplied with acceptance notices.

Computer presentations can be reviewed by authors in the audio/visual preview room at the meeting. Separate computers will be made available in this room for accessing email.
A tutorial presentation on “Man-Made Noise and Aquatic Life: Data, Data Gaps, and Speculation” will be given by Dr. Arthur N. Popper, Professor Emeritus at the University of Maryland (College Park) and Editor, Acoustics Today, on Monday, 18 May 2015 at 7:00 p.m.

**ABSTRACT**

This talk will consider how man-made sounds may impact aquatic life – with a focus on fishes (with possible digressions to invertebrates, marine mammals, and turtles). The talk will start with a discussion of a Jacques Cousteau movie and then ask why animals (and humans) hear. After considering how fishes (and invertebrates) hear, the focus of the talk will turn to potential impacts of sound on these animals and what is currently actually known (based on data and not speculation!) about effects on physiology and behavior. The talk will conclude with a consideration of recent guidelines on effects of sounds and then provide an overview of data gaps and the most important areas for future research.

**LECTURE NOTES**

Lecture notes will be available at the meeting in limited supply. Those who register by 20 April 2015 are guaranteed receipt of a set of notes.

**TUTORIAL LECTURE PREREGISTRATION**

To partially defray the cost of the lecture, a registration fee is charged. The fee is USD$15 for registration received by 20 April 2015 and USD$25 thereafter including on-site registration at the meeting. The fee for students with current ID cards is USD$7 for registration received by 20 April 2015 and USD$12 thereafter, including on-site registration at the meeting. Register online at <http://AcousticalSociety.org> or use the registration form on page 18 to register for the Tutorial Lecture.
INTRODUCTION

The processing and analysis of signals are fundamental to most disciplines in the broad field of acoustics. Many of the algorithms in common use today can be derived as the solutions to optimization problems, particularly those involving the statistics of the signals or phenomena of interest. The optimization framework allows these algorithms to be analyzed and compared in a common context in terms of their bases, strengths, and weaknesses. The choice of the assumptions behind the optimization problems used to derive different algorithms profoundly impacts the algorithms characteristics. Chief among these is the computational complexity of the algorithm as well as the performance of the algorithm, both when the signal or phenomena satisfy the assumptions and when they do not. This course will cover the development and analysis of the common algorithms and approaches used for the processing and analysis of time series in acoustics. The theoretical basis of the algorithms as well their implementation and performance will be covered. The course assumes an advanced undergraduate level of understanding of probability and random processes, linear algebra, and linear dynamic systems.

OBJECTIVE

To introduce the development of analysis and processing algorithms as solutions to optimization problems and present the principles and assumptions behind the development, analysis, and application of commonly used algorithms in the processing of acoustic signals.

INSTRUCTOR

The course instructor is James Preisig of JPAnalytics LLC. During the past 22 years, Dr. Preisig has worked in academia as a Visiting Professor at Northeastern University from 1994 to 1997 and Postdoc (1992 to 1994) and then Scientist (1997 to 2014) at the Woods Hole Oceanographic Institution. During this period he has worked on the development and analysis of adaptive signal processing algorithms including detection, adaptive communications, and adaptive array processing algorithms. He also taught graduate level courses on digital signal processing, adaptive signal processing, time-series analysis and system identification, and array processing. In 2013, Dr. Preisig founded JPAnalytics LLC to continue his work in a small business environment. Dr. Preisig is a Senior Member of the IEEE and a Fellow of the ASA. He serves on the Signal Processing in Acoustics and Underwater Acoustics Technical Committees and the Membership Committee of the ASA.

PROGRAM

Sunday, 17 May 2015, 1:00 p.m. to 5:00 p.m.
Monday, 18 May 2015, 8:30 a.m. to 12:30 p.m.

COURSE OUTLINE

The course will be taught in a lecture/problem set format. Short sections of lecture will be followed by the attendees working in groups to solve problems that highlight the relevant concepts. The major sections of the course will be:

1. Introduction and Background
2. Hypothesis Testing
   a. Likelihood Ratio Test
   b. Cost Functions
   c. The Receiver Operating Characteristic (ROC)
   d. A Priori Information and the Maximum A Posteriori (MAP) Test
3. The Matched Filter
   a. Maximum Likelihood (ML) and Maximum SNR Criteria
   b. Colored Noise Matched Filter
   c. Nuisance Parameters and the Square-Law Detector
   d. Performance
4. Linear Minimum Mean Squared Error (MMSE) Estimation
   a. Inner Products, Orthogonality, and Gradients
   b. The Normal Equations
   c. Performance
   d. The Least Mean Squared (LMS) Algorithms
      i. Gradient Methods and the Stochastic Gradient Approximation
      ii. The LMS Algorithm
   iii. Stability and Performance
   iv. The Normalized and Leaky LMS Algorithms
5. Least Squares Estimation
   a. The MMSE Approximation and ML/MAP Frameworks
   b. Orthogonality Revisited, Projections, and the Innovation Sequence
   c. Derivation of the Recursive Least Squares (RLS) algorithm
   d. Performance Analysis
   e. Time-Updated RLS
6. The Kalman Filter
   a. Model Based MMSE Estimation
   b. Linear State-Space Models
   c. The Innovations Sequence Revisited
   d. The Discrete-Time Kalman Filter
   e. Performance Analysis
   f. The Extended and Linearized Kalman Filters

REGISTRATION

The full registration fee is USD$300 (USD$125 for students) and covers attendance, instructional materials and coffee breaks. The number of attendees will be limited so please register early to avoid disappointment. Only those who have registered by 20 April 2015 will be guaranteed receipt of instruction materials. There will be a USD$50 discount off the full registration fee (discount does not apply to student fee) for registration made prior to 20 April 2015. Full refunds will be made for cancellations prior to 20 April 2015. Any cancellations after 20 April 2015 will be charged a USD$25 processing fee. Register online at <http://AcousticalSociety.org> or use the form on page 18. If you miss the preregistration deadline and are interested in attending the course, please send an email to asa@aip.org.
STUDENT TRANSPORTATION SUBSIDIES

A student transportation subsidies fund has been established to provide limited funds to students to partially defray transportation expenses to meetings. Students presenting papers who propose to travel in groups using economical ground transportation will be given first priority to receive subsidies, although these conditions are not mandatory. No reimbursement is intended for the cost of food or housing. The amount granted each student depends on the number of requests received. To apply for a subsidy, submit a proposal by e-mail to be received by 20 April 2015 to: Jolene Ehl, jehl@aip.org. The proposal should include your status as a student; whether you have submitted an abstract; whether you are a member of ASA; method of travel; if traveling by auto; whether you will travel alone or with other students; names of those traveling with you; and approximate cost of transportation.

YOUNG INVESTIGATOR TRAVEL GRANTS

The Committee on Women in Acoustics (WIA) is sponsoring a Young Investigator Travel Grant to help with travel costs associated with presenting a paper at the Pittsburgh meeting. Young professionals who have completed their doctorate in the past five years are eligible to apply if they plan to present a paper at the Pittsburgh meeting, are not currently students, and have not previously received the award. Each award will be of the order of $450 with two awards anticipated. Awards will be presented by check at the Women in Acoustics luncheon at the meeting. Both men and women may apply. Applicants should submit a request for support, a copy of the abstract for their presentation at the meeting, and a current resume/vita which includes information on their involvement in the field of acoustics and in the ASA. Submit materials by e-mail to Jennifer Lentz <jjlentz@indiana.edu>. Deadline for receipt of applications is 6 April 2015.

STUDENTS MEET MEMBERS FOR LUNCH

The ASA Education Committee arranges one-on-one lunch meetings between students and ASA members. The purpose is to make it easier for students to meet and interact with members at Acoustical Society meetings. Each lunch pairing is arranged separately. Students who are interested should contact Dr. David Blackstock, University of Texas at Austin, by email <dtb@austin.utexas.edu>. Please provide your name, university, department, degree you are seeking (BS, MS, or PhD), research field, acoustical interests, your supervisor's name, days you are free for lunch, and abstract number (or title) of any paper(s) you are presenting. The sign-up deadline is 12 days before the start of the Meeting, but an earlier sign-up is strongly encouraged. Each participant pays for his/her own meal.

PLENARY SESSION, AWARDS CEREMONY, SOCIETY LUNCHEON AND LECTURE, JAM SESSION, AND SOCIAL EVENTS

Buffet socials with cash bar will be held on Tuesday and Thursday, 19 and 21 May.

The ASA Plenary session will be held Wednesday afternoon, 20 May, where Society awards will be presented and recognition of newly-elected Fellows will be announced.

A Society Luncheon and Lecture sponsored by the College of Fellows will be held Thursday, 21 May, at 12:00 noon. This luncheon is open to all attendees and their guests. Register online at <http://AcousticalSociety.org> or use the form on page 18. Tickets cost USD$30.00 each.

Once again the College of Fellows will be hosting the ASA Jam Session. Bring your axe, horn, sticks, voice, or anything else that makes music. Musicians and non-musicians are all welcome to attend. A full PA system, backline equipment, guitars, bass, keyboard, and drum set will be provided. All attendees will enjoy live music, a cash bar, and all-around good times. Don't miss out.

WOMEN IN ACOUSTICS LUNCHEON

The Women in Acoustics luncheon will be held on Wednesday, 7 May. The fee is USD$25 (students USD$15) for pre-registration by 20 April 2015 and USD$30 (students USD$15) at the meeting. Those who wish to attend this luncheon must register online at <http://AcousticalSociety.org> or use the form on page 18.
TRANSPORTATION AND TRAVEL INFORMATION

AIR TRANSPORTATION


GROUND TRANSPORTATION

Transportation from the Pittsburgh International Airport to Wyndham Grand Pittsburgh Downtown Hotel and Downtown Pittsburgh area hotels:

Information: Desks are located in both the Landside and Airside Terminals. Use the white courtesy phones located throughout the airport to reach customer service representatives by dialing 6.

Rail Service: Amtrak’s Pittsburgh (PGH) Station is located at 1100 Liberty Avenue, Pittsburgh, less than 1 mile from the Wyndham Grand Pittsburgh Downtown Hotel. To view routes please visit http://www.amtrak.com/home.

Bus Service: Greyhound bus has an Intermodal Station less than 1 mile from the Wyndham Grand Pittsburgh Downtown Hotel at 55 11th St., Pittsburgh, PA. Phone (412) 392-6514 or visit http://www.greyhound.com/ for rates and reservations.

Major car rental companies: Rental counters are on the baggage claim level of the Landside Terminal.

Airport Shuttle shared-ride service: SuperShuttle passengers share a van with others going in their direction. Advanced reservations and pre-payment for your Pittsburgh airport ride take the time and hassle out of getting to and from the airport. One way to/from Pittsburgh International Airport to Wyndham Grand Pittsburgh Downtown is USD $24.00 and a pre-purchased round trip fare is USD $46.00. SuperShuttle Pittsburgh, (800) 258-3826 http://www.supershuttle.com/Locations/PITAirportShuttlePittsburgh.aspx,

Taxicabs and limousines: Taxis and limousines are available at the Landside terminal outside of baggage claim. Downtown Pittsburgh is approximately 25 minutes from the airport, with fares averaging $40.00-45.00 USD one way. For more information visit; http://www.pitairport.com/limosines_taxis_buses or phone (412) 472-5538.

DRIVING/PARKING INFORMATION

Wyndham Grand Pittsburgh Downtown Hotel, 600 Commonwealth Place, Pittsburgh, PA 15222

From the North
Take 79S, merge onto 279 S to Pittsburgh. Exit 1A on left to Ft. Duquesne Boulevard. Turn right at Stanwix Street. Stay right on Penn Avenue. Turn right on Commonwealth Place.

From the South
Travel 79N, merge to 376 E via exit 59A to Pittsburgh. Exit 70A to Liberty Avenue. Turn left on Commonwealth Place.

From the East
Take 376W, exit 70D on left to Stanwix Street. Turn left at Ft. Pitt Boulevard. Turn right on Commonwealth Place.

From the West
Take 376 E, exit 70A to Liberty Avenue. Turn left on Commonwealth Place.

From Airport
Go North on Airport Blvd and bear slight left to exit Airport. Take 376E towards Pittsburgh to 279N. Exit at 70A for CONSOL Center and take Blvd of Allies / Liberty Avenue exit. Make left at end of ramp onto Commonwealth Place. Parking at the Wyndham Grand Pittsburgh Downtown. Valet parking at the hotel is first come first serve. The overnight charge is $30.00 per night and availability is limited. Current day parking charges are $22.00 per day. To view parking garages in the area and their rates visit, http://apps.pittsburghpa.gov/pga/Facility_rates_and_map.pdf.

WEATHER

Temperatures average mid 70s during the day dipping into the low 60s in the evening. Pittsburgh does tend to see a bit of light rain this time of year, so don’t forget to pack an umbrella!

ROOM SHARING

ASA will compile a list of those who wish to share a hotel room and its cost. To be listed, send your name, telephone number, e-mail address, gender, smoker or nonsmoker preference, not later than 15 April 2015 to the Acoustical Society of America, by e-mail, asa@aip.org. The responsibility for completing any arrangements for room sharing rests solely with the participating individuals.
HOTEL RESERVATION INFORMATION

A block of guest rooms at discounted rates has been reserved for meeting participants at the Wyndham Grand Pittsburgh Downtown Hotel. **Early reservations are strongly recommended.** Note that the special ASA meeting rates are not guaranteed after **25 April 2015**. You must mention the Acoustical Society of America when making your reservations to obtain the special ASA meeting rates.

**Wyndham Grand Pittsburgh Downtown Hotel**

Please make your reservation directly with the Wyndham Grand Pittsburgh Downtown Hotel. If making your reservation by phone you will need to refer to the reservation code 05166781AS or ask for ASA – 2015 Semi-Annual Spring North American Convention to obtain the special ASA rate. The hotel address and phone numbers are as follows.

Wyndham Grand Pittsburgh Downtown Hotel  
600 Commonwealth Place  
Pittsburgh, PA 15222  
Phone: 412-391-4600  
Fax: 412-467-3474  
Web: wyndamgrandpittsburgh.com

**RESERVATION PROCEDURES**

**Online Reservations**

Reservations can be made directly online at the website listed below, which has been set up specifically for the Acoustical Society of America where the meeting rates and all applicable information is incorporated.

https://resweb.passkey.com/Resweb.do?mode=welcome_ei_new&eventID=12219935

**Telephone Reservations**

1-888-317-0197  
or  
412-391-4600

**ROOM RATES**

Single or Double: USD $160.00  
Extra charge for 3rd and 4th occupants: $10/night  
All rooms are subject to 14% state and local occupancy taxes

**Reservation cut-off date: 25 April 2015 at 5:00 p.m. EST**
COMMITTEE MEETINGS

Meetings of Administrative, Technical and Standards Committees, including Working Groups, will be announced in the meeting program if requests are received not later than 12 January 2015. Requests for meeting space, special luncheons, etc., should be made as early as possible to: Gail Paolino, asapit15@gmail.com. Reservations will not be taken by phone. Requesters should note that space is limited, and that late requests can be filled only on a space-available basis.

ASSISTIVE LISTENING DEVICES

Anyone planning to attend the meeting who will require the use of an assistive listening device, is requested to advise the Society in advance of the meeting: Acoustical Society of America, 1305 Walt Whitman Road, Suite 300, Melville, NY 11747-4300, asa@aip.org.

ACCOMPANYING PERSONS PROGRAM

Spouses and other visitors are welcome at the Pittsburgh meeting. The registration fee is USD$125 for pre-registration by 20 April and USD$150 at the meeting.

A hospitality room for accompanying persons will be open at the Wyndham from 8:00 a.m. to 10:00 a.m., Monday through Thursday. Pittsburgh is a beautiful city that has much to see and do. Our plan to offer an exciting program will begin by emailing tour and event information to registered persons prior to the meeting so discussion and interest can begin even before we meet.

Pittsburgh area information:

Market Square
Renovated, refreshed, reinvigorated with more life than ever before! Historic Market Square is once again the hub of Downtown activity. What makes Market Square special? The eclectic mix of old and new, from the Oyster House, which opened in 1871, to restaurants, outdoor cafes, and watering holes that have just opened their doors. The unique attractions, from public art to quirky boutiques. The free events, from concerts and rallies, to one of the region’s best Farmers Markets.

Arts & Culture
Downtown is unquestionably the heart of Pittsburgh’s arts and culture scene. Each night, the Cultural District, 14 square blocks along Penn and Liberty Avenues, buzzes with theatergoers and diners. Enjoy a thrilling night of Broadway at the Benedum Center, or a dramatic evening of symphony, ballet or opera at the Heinz Hall, the home of the internationally-acclaimed Pittsburgh Symphony Orchestra. Both grand, breathtaking theaters, meticulously restored to their historic opulence, are known nationwide for their beauty and impeccable acoustics. On a more modern note, the O’Reilly Theater, designed by the noted Michael Graves, features theater with a contemporary edge. Art plays its part, too—especially at the popular free Pittsburgh Cultural Trust Gallery Crawls, held each quarter to showcase the Cultural District’s many galleries and art spaces, and when you go to a Gallery Crawl, don’t forget to stop by our Night Market which is held in conjunction with each Gallery Crawl.

Looking for a more historical day in Downtown? Head over to the Senator John Heinz History Center and the Western PA Sports Museum to explore their newest exhibit. The Sports Museum captures the unforgettable and almost forgotten tales of Pittsburgh sports through hundreds of artifacts, more than 70 hands-on interactive exhibits, and 20 audio-visual programs. The History Center is Pennsylvania’s largest history museum and presents the most compelling stories from American history with a Western Pennsylvania connection. Or, take a stroll down to the Fort Pitt Museum to learn about Western Pennsylvania's pivotal role during the French & Indian War, the American Revolution, and as the birthplace of Pittsburgh—perfect for field trip, families and history buffs!

Sports & Recreation
With a rich sports history going back more than a century, fans pack world-class venues, Heinz Field, Consol Energy Center, PNC Park, and Highmark Stadium to cheer on the hometown Steelers, Penguins, Pirates, Power, and Riverhounds.

Miles of riverfront trails with spectacular views of the city skyline are ideal for walking, jogging, biking and rollerblading. Love the water? Rent a kayak and paddle down the sparkling Three Rivers. Downtown’s Point State Park, at the scenic confluence of the Allegheny, Monongahela and Ohio rivers, offers wide open green space for tossing a Frisbee, playing catch, or kicking the soccer ball around with the kids.
REGISTRATION INFORMATION

The registration desk at the meeting will open on Monday, 18 May. Register online at <http://AcousticalSociety.org> or use the form on page 18. If your registration is not received at the ASA headquarters by 20 April you must register on-site.

Registration fees are USD as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Preregistration by 20 April</th>
<th>Onsite Registration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acoustical Society Members</td>
<td>$495</td>
<td>$570</td>
</tr>
<tr>
<td>Acoustical Society Members One-Day Attendance*</td>
<td>$245</td>
<td>$295</td>
</tr>
<tr>
<td>Nonmembers</td>
<td>$570</td>
<td>$645</td>
</tr>
<tr>
<td>Nonmembers One-Day Attendance*</td>
<td>$285</td>
<td>$360</td>
</tr>
<tr>
<td>Nonmember Invited Speakers One-Day Attendance*</td>
<td>Fee waived</td>
<td>Fee waived</td>
</tr>
<tr>
<td>Nonmember Invited Speakers</td>
<td>$115</td>
<td>$115</td>
</tr>
<tr>
<td>ASA Early Career Members</td>
<td>$245</td>
<td>$295</td>
</tr>
<tr>
<td>ASA Student Members (with current ID cards)</td>
<td>$50</td>
<td>$100</td>
</tr>
<tr>
<td>Nonmember Students (with current ID cards)</td>
<td>$90</td>
<td>$140</td>
</tr>
<tr>
<td>ASA Emeritus Members (Emeritus status pre-approved by ASA)</td>
<td>$125</td>
<td>$150</td>
</tr>
<tr>
<td>Accompanying Persons (Registrants who will not participate in the technical sessions)</td>
<td>$125</td>
<td>$150</td>
</tr>
</tbody>
</table>

Nonmembers who register for the full meeting week and simultaneously apply for Associate Membership in the Acoustical Society of America will be given a USD $50 discount off their dues payment for the first year (2015) of membership. Invited speakers who are members of the Acoustical Society of America are expected to pay the registration fee, but nonmember invited speakers may register for one-day only without charge. A nonmember invited speaker who pays the full-week registration fee, will be given one free year of membership upon completion of an ASA application form.

NOTE: A $25 FEE WILL BE CHARGED FOR CANCELLATIONS AFTER 20 APRIL.

ONLINE REGISTRATION


*One-day registration is for participants who will attend the meeting for only one day. If you will be at the meeting for more than one day either presenting a paper and/or attending sessions, you must register and pay the full registration fee.
Please type or print clearly

Last Name (Surname) ____________________________
First Name ____________________________ Middle Initial

Name as it should appear on your badge ____________________________

Company/Organization (will be printed on badge) ____________________________

Street Address ____________________________
City ____________________________
State or Province ____________________________ Zip or Postal Code ____________________________

Telephone Number ____________________________ Fax Number ____________________________

E-mail Address ____________________________

Name of Accompanying Guest (for badge) ____________________________

Mail form with payment to:
Acoustical Society of America
1305 Walt Whitman Rd., Suite 300
Melville, NY 11747-4300
FAX (payment by credit card only): 631-923-2875

If your registration is not received at the ASA headquarters by 20 April 2015 you must register onsite. Preregistrations received after 20 April 2015 will not be processed.
INSTRUCTIONS FOR SUBMITTING ABSTRACTS ONLINE

Complete instructions for the preparation and submission of abstracts is provided online.

Acknowledgment that your abstract has been received will be sent by e-mail. **Please note that if you do not receive an email message your abstract has not been entered into the database.**

1. Online Abstract Submission site is accessed on the ASA Home Page at http://AcousticalSociety.org

2. Click “Submit Abstract for the Pittsburgh meeting” from the main page

3. Use the Create an Account link if you do not already have a log-in.

4. You must first create an account and set up a username and password if you have not already done so in connection with submission of abstracts for a prior ASA meeting.

5. After logging into the submission site, click the “Submission” tab.

6. To begin a new abstract click “Create a New Submission” in the sidebar located on the left-hand side of the screen.

7. If at any time during the submission process you need technical support click the “Help” button at the top right side of the screen.

8. Abstracts are limited to 200 words (approximately 1500 characters).

9. The body of the abstract can be cut and pasted into the submission site. Note that if special characters did not copy/paste correctly from your word processing software, LaTex coding cannot be cut and pasted and must be entered using the Special Character palette which appears on the Title/Body Screen.

10. Enter all authors and their affiliations in the order they should appear in the abstract. **Note:** Only one affiliation may be included for each author. Do not enter information that you do not wish to appear online or in print such as home address or personal e-mail address.

11. Carefully check the proof of your abstract. Make sure all special characters and formatting are displaying properly, that the authors and affiliations are listed in the proper order, and that no information needs to be changed. Print or copy for your records, if desired.

12. When all the required information for your submission is entered, the “Submit Abstract” button will appear at the Proof and Submit stage. Click the “Submit Abstract” button to submit the abstract.

13. Upon submission of your abstract you will receive an e-mail confirmation.

14. To view or edit an existing submission click “View Submissions” in the sidebar located on the left-hand side of the screen.

15. To edit an existing submission you must select “Return to Draft” and then select “Edit.” All abstracts that are returned to draft must be resubmitted to be entered into the system. If not, the submission will remain in the Drafts stage and will not be scheduled for presentation.
ENTRY REQUIREMENTS FOR BEST PAPER AWARDS FOR STUDENTS AND YOUNG PRESENTERS

Several of the ASA Technical Committees offer Best Paper Awards to students and young presenters who present papers at Society meetings. If you want your paper to be considered for an award, you must indicate this when you submit your abstract. Follow the instructions for the appropriate technical area that appear below. Note that there are separate instructions for the Technical Committee on Biomedical Acoustics.

ASA BEST STUDENT PAPER AWARDS

COMMITTEES OFFERING THESE AWARDS:

AWARD AMOUNTS:
For each of the Technical Committees granting awards, up to two awards will be presented to students presenting papers in sessions organized by the specific Technical Committee: USD$300 for first prize and USD$200 for second prize.

QUALIFICATIONS:
To qualify for each of these awards, an author must:

- be enrolled as a student at least half-time (graduates are eligible if the work being presented was performed as a student within one year of the meeting). Note that you do not need to be a member of the ASA to qualify.
- be listed as the first author on the submitted abstract
- Speech Communication entries: Authors must select poster-only presentation format
- present the paper at the meeting

SELECTION:
The award winners will be selected by a subcommittee of each of the Technical Committees granting awards, based upon the quality of both the content of the paper and its presentation. The awards will be announced either at the meeting of the Technical Committee or after the close of the meeting.

APPLICATION:
All those who wish to participate in the competition for these awards must indicate their intention to enter the competition during the abstract submission process by clicking the entry box on the online submission form.

Special Note for Speech Communication entries: Please choose Poster Only as your preferred presentation type during the abstract submission process to be eligible for the Best Student Poster Award Competition for Speech Communication. If you do not choose 'Poster Only' and your paper is subsequently assigned to an oral presentation, you cannot be considered for the Best Student Poster Award Competition for Speech Communication.
BIOMEDICAL ACOUSTICS STUDENT PAPER AWARD

The ASA Technical Committee on Biomedical Acoustics offers a Best Student Poster Award to students who present at spring meetings. Students who enter the competition are expected to give an oral presentation in a regular/special session and defend a poster in a separate student poster session. Only the poster presentation will be judged for the competition. Abstracts submitted by students who elect to participate in the competition will be listed in the program in appropriate oral sessions. Please read the entry qualifications that appear below to be sure you are eligible and follow the instructions for entering the competition.

AWARD AMOUNTS:
Up to three awards will be presented to students presenting papers in sessions organized by the Technical Committee on Biomedical Acoustics and participating in the special student poster session: USD$500 for first prize, USD$300 for second prize, and USD$200 for third prize.

QUALIFICATIONS:
To qualify for an award, a student must:

▶ be enrolled as a student at least half-time (graduates are eligible if the work being presented was performed as a student within one year of the meeting). Note that you do not need to be a member of the ASA to qualify.
▶ be listed as the first author on the submitted abstract
▶ present the paper at the meeting
▶ defend the poster at a special student poster session, which will be open to all attendees

SELECTION:
The awardees will be selected by a panel of judges, based upon the quality of the content of the poster and a brief presentation to the judges during a designated poster session. The award winners will be announced either at the meeting of the Biomedical Acoustics Technical Committee or after the close of the meeting.

APPLICATION:
All those who wish to participate in the competition must indicate their intention by clicking the entry box on the online abstract submission form. Additional details will be sent to entrants after the program has been organized.

ASA BEST "OUTSTANDING PAPER BY A YOUNG PRESENTER" AWARDS

Note that you need not be a student to qualify for these two awards.

COMMITTEES OFFERING THESE AWARDS:
Noise and Signal Processing in Acoustics

AWARD AMOUNTS:
Noise - Up to three awards of up to USD$250 each will be given for outstanding papers presented in sessions organized by the Technical Committee on Noise.

Signal Processing - One award of USD$500 will be given for outstanding paper presented in a session organized by the Technical Committee on Signal Processing in Acoustics.

QUALIFICATIONS:
To qualify for an award, the paper author must:

▶ be under 30 years of age as of 1 January 2015
▶ be listed as the first author of the paper and actually present the paper

SELECTION:
Selection of the award winners will be based on the quality of the presented paper, comprising both the content and its delivery. The award winners will be chosen by a subcommittee of the Technical Committee and will be announced after the close of the meeting.

APPLICATION:
The Award Subcommittees would like to consider papers by all authors who meet the eligibility criteria. Neither membership in the Acoustical Society, nor previous experience in the ASA, is required. Because the committees have no other way to identify eligible authors, however, it is essential that eligible authors indicate their intention to enter the competition during the abstract submission process by clicking the entry box on the online submission form.