



AUDIO ENGINEERING SOCIETY

CALL for CONTRIBUTIONS

AES 52ND INTERNATIONAL CONFERENCE

Sound Field Control, Engineering and Perception

Guildford, UK September 2–4, 2013



Chair: Francis Rumsey. Email: 52nd_chair@aes.org
Papers chairs: Søren Bech, B&O, Denmark; Filippo Fazi, University of Southampton, UK. Email: 52nd_papers@aes.org

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Philip Jackson, University of Surrey, UK.
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Sound field control enables the active management of audio delivered in an acoustical environment. Sophisticated signal capture, processing and reproduction tools increasingly enable the engineer to tailor the sound field for specific applications, occupancy or listeners' requirements. This can include the creation of independent sound zones in listening spaces, the active control of noise, personal communication systems, the electroacoustic manipulation of auditorium acoustics, and the recording and synthesis of complex spatial sound fields using multichannel audio systems. Application areas include automotive audio, telecommunications, consumer entertainment systems, portable devices, aircraft interiors, virtual reality, live music and professional audio, concert halls, cinemas, museums and other public venues. All this raises questions such as how sound fields can be controlled without detriment to sound quality, what the perceptual effects of different methods of control might be, and how to optimize systems for a specific quality of experience, with respect to both signal processing and hardware. This conference aims to bring together engineers and perceptual scientists from around the world to share their research in the field, to discuss the numerous interactions between acoustics, signal processing, psychoacoustics and auditory cognition in this fast-moving field. The three-day conference program is focused around the dissemination and discussion of technical solutions and recommended practices, which may stimulate new ideas on potential industrial applications of sound field control technologies. As well as the usual lectures and poster sessions, the conference will also include opportunity for demonstrations, tutorials and workshops.

PROPOSED TOPICS

Sound field control theory
Sound field sampling for control purposes
Signal processing for sound field control
Active and adaptive sound control
Transducers, array design, beam-forming
Sound field control applications, e.g:
telecommunications, personal devices, automotive,
consumer and hi-fi audio, PA systems, virtual reality

and game audio, museums and installations,
auditorium acoustics, aircraft interiors, hearing
impaired.
Spatial sound field control and multichannel audio
Psychoacoustics, e.g: speech intelligibility with
interfering noise/speech, cocktail party effects, masking
Perceptual models
Sound quality evaluation

SUBMISSION INFORMATION

All submissions should have a clear connection with sound field control. Content should reflect the scientific progress made, whether in the realms of acoustical engineering or psychoacoustics, and highlight relevant contributions or conclusions to attendees. We encourage multi-disciplinary approaches to the area and an exploration of the interaction between sound field and listeners.

Submissions may be in the following formats: **paper**; **tutorial** or **workshop** proposals to be held in the main conference thread; **demonstration** proposals. Papers may be presented in the main sessions or as a poster, at the discretion of the committee, although authors may indicate a preference. **Paper proposals** should consist of title, abstract (60 to 120 words), and précis (500 to 750 words), or alternatively, a full and complete paper (encouraged for full peer review) to be submitted at http://www.aes.org/52nd_authors by **January 31, 2013**. Authors of peer reviewed papers will be asked to indicate whether they wish their paper to be considered for inclusion in a special issue of the Journal of the Audio Engineering Society devoted to the topic of sound field control. Acceptance of papers will be determined by the 52nd International Conference review committee based on an assessment of the abstract and précis, or full paper submission. Accepted authors will be notified by **March 29, 2013**. Final manuscripts of a maximum of 10 pages (3000 words) must be submitted by **May 13, 2013**. If you have any questions about paper or poster submissions, contact 52nd_papers@aes.org. Conference website: <http://www.aes.org/conferences/52/>

Tutorial, workshop or demonstration proposals should be emailed directly to 52nd_workshops@aes.org. Proposals for tutorials or workshops should include a title, abstract, session chair, and possible contributors. If accepted, these will also be included in the conference proceedings.

Registration: a reduced registration fee will be available for authors. At least one author of each contribution must pay to register for the conference, and attend to present, or it will not be included in the proceedings. Any author wishing to attend the conference must pay the registration fee.

IMPORTANT DATES

Deadline for paper proposals: **2013 January 31**
Deadline for proposals for tutorials and workshops: **2013 March 1**

Accepted authors notified by: **2013 March 29**
Deadline for final manuscripts: **2013 May 13**