

AUDIO ENGINEERING SOCIETY

CALL for CONTRIBUTIONS

AES 38th International CONFERENCE, 2010

Sound Quality Evaluation



Dates: June 13–June 15, 2010,
Chair: Jan Berg, Luleå Univ. of Technology,

Location: Piteå, Sweden
Email: 38th_chair@aes.org

Piteå, Sweden

The perceptual evaluation of sound quality is a complex field that involves a number of diverse disciplines including engineering, psychology, statistics, aesthetics, and language. Classical psychoacoustics has tended to concentrate on studying relatively simple stimuli and their auditory response, whereas sound quality evaluation requires methods that connect more directly with everyday listening experience, perhaps using real-world program material and contexts. Increasingly, attempts are being made to emulate the human perception of sound quality using computational models. The challenges of these are considerable and it is necessary to determine the strengths and weaknesses of these so-called “artificial listeners.” There is considerable debate about the value of such models, and data is needed that enables the scientist to understand the limits and benefits of the technology. One can ask whether methods used widely in other areas of sensory evaluation, such as food and beverage, are applicable to audio engineering, or whether we can learn from the work going on in picture quality analysis. Finally there is the question of the contribution of audio to multimodal quality perception and the so-called “Quality of Experience” that arises from the entire user experience of a product or service.

The 38th Conference Committee invites papers from those working in the theory, practice, and application of sound quality evaluation. It also aims to offer invited presentations from experts working in related fields, as well as workshops, demonstrations, and on-site experiments. By **January 13**, 2010, a proposed title, 60-word abstract, and a 500-word précis of the paper should be submitted via the Internet to www.aes.org/38th_authors. Please open an account here as early as possible after November 4, 2009, so that the organizing committee can monitor interest. By **January 27**, 2010 authors will receive provisional acceptance or rejection. By **February 24**, 2010 a full 4- to 10-page paper is due. Guidelines are available at www.aes.org/journal/con_infoauth.html. Papers for the conference will be submitted to a screening review. Authors should indicate if they wish their paper to be considered for full review and publication in the *AES Journal*. By **March 24**, 2010 authors will be informed of paper acceptance (with possible requests for editorial revision) or rejection. The deadline for final, revised papers is **April 21**, 2010.

PROPOSED TOPICS FOR PAPERS

- Perceptual models for sound quality prediction
- Quantification of multimodal sensory experiences
audio, visual, and haptic interaction
contribution of audio to Quality of Experience (QoE)
- Sound quality theories
e.g. definitions, aesthetics, contextual dependency
- Experimental paradigms and data analysis techniques
verbal/nonverbal graphical methods
behavioral approaches
qualitative/quantitative data
absolute/relative evaluation
preference/attribute/MOS
- test methodology, experimental design, and statistical analysis
high-efficiency evaluation procedures
- Practical applications of sound quality evaluation
e.g. automotive audio, domestic listening, mobile platforms, game audio, noise quality
- Listener selection, training, and performance
- Analysis of recordings
strategies for recording analysis
methods for evaluating artistic/creative/aesthetic aspects
- Future applications of sound quality evaluation

SUBMISSION OF PAPERS

PAPERS COCHAIRS
Søren Bech and Francis Rumsey
Email: 38th_papers@aes.org

Proposals for practical demonstrations, experiments, and workshops are also welcomed, and should be sent by **2010 January 13** to:

WORKSHOPS CHAIR
Nick Zacharov
Email: 38th_workshops@aes.org

SCHEDULE

Nov. 4, 2009: Author's website opens at http://www.aes.org/38th_authors.

Jan. 13, 2010: Submission of 500-word précis.

Jan. 27, 2010: Provisional acceptance or rejection communicated to authors.

Feb. 24, 2010: Full, 4- to 10-page paper submission deadline.

Mar. 24, 2010: Author acceptances are emailed.

Apr. 21, 2010: Final paper submission deadline for revised papers.