

# AUDIO ENGINEERING SOCIETY

## CALL for PAPERS

### AES 35th CONFERENCE, 2009

#### Audio for Games

#### London, UK



**Dates:** February 11–13, 2009

**Location:** London, UK

**Chair:** Michael Kelly, Sony Computer Entertainment

**Email:** 35th\_chair@aes.org

The Audio Engineering Society is pleased to announce its first ever conference dedicated to audio for games, to be held 2009 February 11-13 at the Royal Academy of Engineering, London, UK. Current- and next-generation gaming platforms offer unprecedented levels of processing power specifically for audio. These changes facilitate a range of complex real-time audio architectures and DSP effects, offering creative possibilities never before seen in the areas of interactive sound design and music composition. Such developments in technology also present new challenges in audio programming and engineering, drawing on areas of multidisciplinary expertise that were not previously relevant. This conference focuses on these new challenges, bringing together new and established professionals in the area of audio for games. The conference aims to reflect the needs and interests of all professionals working in or around the area of game audio, further the dialog between existing industry experts, create a forum for sharing techniques and technology, and help advance game audio on current and future platforms. The three-day conference program is focussed around the dissemination and discussion of technical solutions and recommended practices. As well as the usual paper and poster sessions, the conference will also consist of demonstrations, panel discussions, tutorials, and workshops. This call for submissions invites contributions in all formats, and we encourage proposers to think beyond the usual conference paper/poster format. Gaming is by its very nature an interactive experience, and we would like the conference program to reflect this. We welcome submissions in all relevant areas, including, but not limited to:

## PROPOSED TOPICS

### Spatial audio in games

- Mixing for unknown loudspeaker configurations
- Upmix and downmix
- Spatialization and environment modeling

### Interactive reverb algorithms

- I3DL2 implementations
- Interactive reverb algorithms
- Acoustic modeling and auralization
- Impulse response measurement and simulation

### Real-time synthesis

- Synthesis architectures
- Granular synthesis
- Physical modeling
- Novel use of traditional synthesis techniques

### Audio codecs

- Real-time codecs and usage
- Seeking and looping in encoded bitstreams
- Codec quality
- Fast and low bit-rate codecs
- Audio distribution systems

- Loudspeaker layouts
- Recording and mix levels
- Scripting file formats
- Future areas for standardization

### Sound design, recording, and Foley

- Techniques and case studies
- Perception of interactive audio
- Nonrepetitive design

### Game music systems

- Interactive and generative music
- Nonlinear composition
- Online gaming

### Speech processing and analysis

- Pitch analysis in singing
- Mixing voice with game
- Voice management with multiple talkers
- Speech recognition and synthesis

### Training and education

- Audio in interactive training applications
- Game-audio course material and certification

## SUBMISSION INFORMATION

All submissions should have a clear application in game audio or interactive audio. Content should reflect the engineering progress made and highlight relevant contributions or conclusions to attendees. We encourage multidisciplinary approaches to the area and an exploration of the interaction between sound designer and audio engineer.

**Submissions may be in the following formats:** paper (to be presented in the main sessions); poster or demonstration (to be presented in the poster sessions); tutorial, panel, or workshop proposals to be held in the main conference thread.

**Paper or poster** proposals should consist of title, abstract (60 to 120 words), and précis (500 to 750 words) to be submitted online by **September 26, 2008** at <[www.aes.org/35th\\_authors](http://www.aes.org/35th_authors)>. Acceptance of papers will be determined by the 35th Conference review committee based on an assessment of the abstract and précis. Accepted authors will be notified by October 22, 2008. Complete manuscripts of a maximum of 10 pages (3000 words) must be submitted by November 19, 2008.

**Tutorial, panel, or workshop** proposals should be emailed directly to <[35th\\_sessions@aes.org](mailto:35th_sessions@aes.org)>. Proposals should include a title, abstract, session chair, and possible contributors. If accepted, these will also be included in the conference proceedings.

### Deadline for paper/poster proposals: 2008 September 26

Accepted authors notified by: 2008 October 22

Deadline for final manuscripts: 2008 November 19

**Papers chair:** Damian Murphy <[35th\\_papers@aes.org](mailto:35th_papers@aes.org)>

University of York Audio Lab

### Deadline for proposals for tutorials, panels, and workshops: 2008 September 26

**Michael Kelly** <[35th\\_chair@aes.org](mailto:35th_chair@aes.org)>

Sony Computer Entertainment Europe