

# 2015 IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA'15)



The 2015 IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA'15) will be held at the Mohonk Mountain House in New Paltz, New York, and is supported by the Audio and Acoustic Signal Processing technical committee of the IEEE Signal Processing Society. The objective of this workshop is to provide an informal environment for the discussion of problems in audio and acoustics and signal processing techniques leading to novel solutions. Technical sessions will be scheduled throughout the day. Afternoons will be left free for informal meetings among workshop participants. Papers describing original research and new concepts are solicited for technical sessions on, but not limited to, the following topics:

## Acoustic Signal Processing

- Source separation: Single- and multi-microphone techniques
- Source localization
- Signal enhancement: Dereverberation, noise reduction, echo reduction
- Microphone and loudspeaker array processing
- Acoustic sensor networks: Distributed algorithms, synchronization
- Acoustic scene analysis: Event detection and classification
- Room acoustics

## Audio and Music Signal Processing

- Content-based music retrieval: Fingerprinting, matching, cover song retrieval
- Musical signal analysis: Segmentation, classification, transcription
- Music signal synthesis: Waveforms, instrument models, singing
- Music separation: Direct-ambient decomposition, vocal and instruments
- Audio effects: Artificial reverberation, guitar amplifier modeling
- Upmixing and downmixing

## Audio and Speech Coding

- Waveform coding and parameter coding
- Spatial audio coding
- Sparse representations
- Low-delay audio and speech coding
- Digital rights

## Hearing and Perception

- Hearing aids
- Computational auditory scene analysis
- Auditory perception
- Spatial hearing
- Speech and audio quality assessment

[www.waspaa.com](http://www.waspaa.com)  
Mohonk Mountain House  
New Paltz, New York  
October 18-21, 2015

## Workshop Committee

### General Chairs

Laurent Daudet  
Université Paris Diderot

Gaël Richard  
Telecom ParisTech

### Technical Program Chair

Bryan Pardo  
Northwestern University

### Finance Chair

Dorothea Kolossa  
Ruhr-Universität Bochum

### Far East Liaison

Nobutaka Ono  
National Institute of Informatics (Japan)

### Publ. Chair & Industry Liaison

John Hershey  
Mitsubishi Electric Research Laboratories

### Local Arrangements Chair

Juan Bello  
New York University

### Registration Chair

Bob L. Sturm  
Queen Mary University of London

## Important Dates

Submission of four-page paper  
April 17, 2015

Notification of acceptance  
June 26, 2015

Early registration until  
August 14, 2015

Workshop  
October 18-21, 2015

