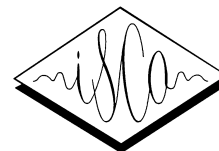


Call for Papers Special Issue of
SPEECH COMMUNICATION
on



Perceptual and Statistical Audition

Aims and Scope

Current trends in audio analysis are strongly founded in statistical principles, or on approaches that are influenced by empirically derived, or perceptually motivated rules of auditory perception. These approaches are perceived as orthogonal, but new ideas that draw upon from both perceptual and statistical principles can often result in superior performance. The relationship of these two approaches however, has not been thoroughly explored and is still a developing field of research.

In this special issue we invite researchers to submit papers on original and previously unpublished work on both approaches, and especially on hybrid techniques that combine perceptual and statistical principles, as applied to speech, music and audio analysis. Recent advances in neurosciences have emphasized the important role of spectro-temporal modulations in human perception. We encourage submission of original and previously unpublished work on techniques that exploit the information in spectro-temporal modulations, particularly within a statistical framework.

Papers describing relevant research and new concepts are solicited on, but not limited to, the following topics:

- Analysis of audio including speech and music
- Audio classification
- Speech recognition
- Signal separation
- Multi-channel analysis
- Computational Auditory Scene Analysis (CASA)
- Spectro-temporal modulation methods
- Perceptual aspects of statistical algorithms, such as Independent Component Analysis and Non-negative Matrix Factorization.
- Hybrid methods that use CASA-like cues in a statistical framework

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Submission Guidelines

Authors should consult the "Guide for Authors", available online, at <http://www.elsevier.com/locate/specom> for information about the preparation of their manuscripts. Authors, please submit your paper via <http://ees.elsevier.com/specom>, choosing "**Perceptual and Statistical Audition**" as the Article Type. If you are a first time user of the system, please register yourself as an author.