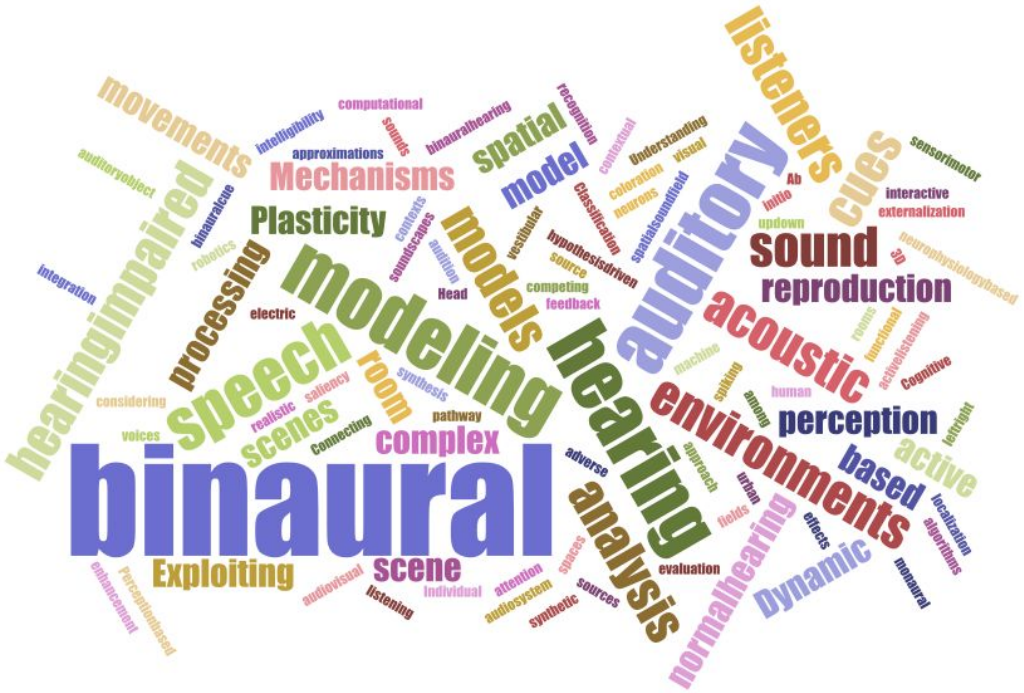
Call for papers

Special issue on “Auditory models: from binaural processing to multimodal cognition”



Editors

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Background

Human listeners infer spatial representations of their environment in order to interact with it and benefit from binaural processes when aiming to understand speech in complex settings. Models are inevitable in trying to understand the functional complexity of the auditory system and need to consider subcortical and cortical auditory processes as an integral part of a larger system. For example, such models may need to integrate other senses and priors about the assumed environmental states in order to explain perceptual or behavioral outcomes.

Scope of the special issue

In this special issue, we present a collection of recent advances in research on conceptual and computational auditory models with a particular focus on spatial hearing. The computational models will be collected in the auditory modeling toolbox (AMT), setting a baseline of reproducible results for future research in the field. However, also contributions proposing and reviewing conceptual models will be part of the special issue, extending the horizon of auditory models ranging from binaural processing to multimodal cognition.

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Submissions

All kinds of relevant papers will be considered and reviewed by a distinguished team of international experts: full length original research articles, reviews, letters, and technical briefs that address computational and/or conceptual models of the normal or impaired auditory system. Relevant topics include but are not limited to: binaural processing, spatial hearing, selective attention, multimodal cognition as well as model applications in contexts like spatial sound reproduction.

Timeline:

- Recommended abstract submission: December 2020
- Deadline for submission: March 2021
- First round of review: June 2021
- First papers published: September 2021

Manuscripts can be submitted online via the journal's submission and peer-review site. Register choosing the title of the special issue "Auditory models: from binaural processing to multimodal cognition". Please find further instructions for authors at https://acta-acustica.edpsciences.org/author-information/instructions-for-authors