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TITLE: A novel method for perceptual assessment of small room acoustics using rapid sensory analysis
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ABSTRACT BODY:
Abstract (200 words): Identifying and perceptually characterizing the physical properties of rooms is a fundamental step in understanding the acoustical qualities of a space. Over the last century, numerous studies have investigated the perceptual qualities in performance spaces, such as opera houses and concert halls. In smaller spaces, such as domestic environments, the research focus has been primarily steered towards sound reproduction within a room, rather than the transmission medium, the room.

In this study, a new methodology is used to perceptually assess and characterize a range of acoustical properties within small rooms and car cabins. In-situ measurements were performed to obtain a range of possible acoustical settings, by varying physically the spaces under investigation. The measured responses were spatially analyzed and synthesized to reproduce the observed fields in the laboratory. Expert listeners were presented with auralized sound over a loudspeaker array and followed a rapid sensory analysis protocol. The elicited attributes and ratings are analyzed and possible links to the acoustical properties of these spaces are discussed.
This study is a part of Marie Curie Network on Dereverberation and Reverberation of Audio, Music, and Speech. EU-FP7 under agreement ITN-GA-2012-316969.
CURRENT TECHNICAL COMMITTEE: Architectural Acoustics
CURRENT SPECIAL SESSION. IF NOT SUBMITTING TO A SPECIAL SESSION, CHOOSE "NONE SELECTED.": None Selected
PRESENTATION TYPE: Contributed Submission : Lecture
PRESENTER: Neofytos Kaplanis
AWARDS: ASA Best Paper Awards For Students and Young Presenters
AV Equipment: presentation will be on a MAC computer. If that's not possible, I will provide a pdf version to be used with any PC.
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