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IR	ftp://ftp.esat.kuleuven.be/pub/SISTA/vanwaterschoot/abstracts/15-37.html

(article begins on next page)

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TITLE: The perceptual influence of the cabin acoustics on the reproduced sound of a car audio system

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ABSTRACT BODY:

Abstract (200 words): A significant element of audio evaluation experiments is the availability of verbal descriptors that can accurately characterize the perceived auditory events. In terms of room acoustics, understanding the perceptual effects of the physical properties of the space would enable a better understanding of its acoustical qualities, and stipulate perceptually relevant ways to compensate for the subsequent degradations. In contrast to concert halls, perceptual evaluation of everyday-sized and less reverberant spaces has been a challenging task, and literature on the subject is limited. In this study, a sensory evaluation methodology [Lokki et al., J.Acousti.Soc.Am. 132, 3148-2161 (2012)] was employed to identify the most relevant attributes that characterize the influence of the physical properties of a car cabin on the reproduced sound field. A series of in-situ measurements of a high-end car audio system was performed for different physical settings of the car's cabin. A novel spatial auralization methodology was then used, and participants were asked to describe verbally the perceived acoustical characteristics of the stimuli. The elicited attributes were then analyzed following a previous review [Kaplanis et al., In Aud.Eng.Soc. 55th Intern.Conf. (2014)] and possible links to the acoustical properties of the car cabin 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 (AA)

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:

Additional Comments:

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