

AIA-DAGA 2013

Conference on Acoustics



EAA Euroregio - EAA Winter School

18-21 March 2013 in Merano



Program



AIA-DAGA 2013**Conference on Acoustics, Merano****EAA Euroregio - EAA Winter School**

including

- 40th Italian Annual Conference on Acoustics (AIA)
- 39th German Annual Conference on Acoustics (DAGA)

Homepage: <http://www.aia-daga.eu>E-Mail: info2013@aia-daga.eu**organized by:**

- Acoustical Society of Italy (AIA)
- German Acoustical Society (DEGA)

in cooperation with:

- European Acoustics Association (EAA)
- Austrian Acoustics Association (AAA)
- Swiss Acoustical Society (SGA-SSA)

and the support of:

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Title picture:View onto Merano - unknown painter (early 19th century),
Civic museum of Merano

Wed 10:40 Kurhaus Czerny hall

Soundscaping: Understanding

Soundscape MonitoringDick Botteldooren, Bert de Coensel, Damiano Oldoni and Michiel Boes
Ghent University

The soundscape: the sonic environment as perceived and understood within a context by a user is hard to measure. Still being able to approximately mimic how a human listener would interact with the sonic environment in electronic equipment would open a wide range of opportunities for the soundscape researcher and designer. Monitoring how the soundscape evolves over the day, the week, the seasons, gives insight in the acoustic ecology that is hard to grasp during a short visit or a sound walk. Therefore computational intelligence techniques were developed and implemented on sound monitoring networks that are able to mimic part of the human perception of the sonic environment. For such systems to work in diverse sound environments, some form of learning and adaptivity is essential. In addition attention and gating mechanisms must be implemented to be able to determine the sounds that a human listener would most likely notice. Holistic indicators are added to assess effects on mood and emotion that do not involve sound recognition. The soundscape monitoring system has been deployed as part of the IDEA project at several urban locations and the results are compared to human observations.

Wed 11:00 Kurhaus Czerny hall

Soundscaping: Understanding

Audio-visual interaction in the context of soundscape assessmentAnna Preis and Marcin Praszowski
Adam Mickiewicz University, Poznan (PL)

The aim of the study was to examine how visual information influences soundscape assessment. Seven different city soundscapes and landscapes were recorded. Video samples added to the audio samples were presented to the participants of the psychophysical experiment. They were asked to rate on the numerical scale the degree of comfort or discomfort while imagining to be in such environment. Actually, the participants were sitting in front of the computer screen, watching and listening to the audio and audio-video samples. The assessments of soundscape's comfort or discomfort were carried out in three different conditions: (a) audio samples only, (b) matching video and audio samples (c) nonmatching video and audio samples. The general result of this experiment showed significant difference between the investigated conditions (a) and (b). The results allow to validate the usefulness of the comfort and discomfort scales as the perceptual measures of soundscape. It occurred that in four out of seven cases participants were not able to differentiate the soundscapes regarding the comfort assessment. Therefore, the paper discusses if and when people can differentiate soundscapes and how to construct the subjective scale of soundscape evaluation.