

## euro-noise 2009

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**Session:** Sound Quality Evaluation

**Chair:** Hugo Fastl

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### Application of different methods for sound quality evaluation - Advantages and limitations

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Listening tests and experiments are often executed with the general aim to identify important psycho-physical quantities reflecting the human responses to specific evaluation criteria. In industrial applications it is a common task to investigate the sound quality of product noises, which must be carried out in a time-saving and efficient way. There, most significant acoustical parameters are detected, which greatly contribute to the perceived sound quality, and it is assumed that on the basis of the obtained results the sound quality of new and untested sounds can be reliably predicted.

In the presented study, several psycho-physical methods and procedures are tested and applied to examine the sound quality of a small quantity of product noises. In addition to the use of conventional psycho-physical methods, few qualitative and explorative methods are used to study the perception and evaluation of sound quality more in detail.

The explanatory power of all achieved results will be compared and advantages as well as limitations of certain methods will be highlighted. Moreover, the possibility of combining methods to achieve well-grounded results will also be discussed.