

## **ASA Spring 2019**

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Place: Louisville, Kentucky/USA

Title: Reliability and Validity of Sound Quality Metrics versus Objectivity

Session: "Advances and Applications in Sound Quality Metrics"

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## Abstract:

Often it is mentioned to get an objective measurement of the subjective evaluation. The result is a sound quality metric. The terms subjective and objective are traditionally associated with aspects related to human perception and physical measures respectively. Objectivity describes the independency of test results from the respective researcher, reliability considers whether the same results would be achieved, if the research procedure would be repeated, validity means whether a method measures what it is intended to measure. Physical measurements could have a high reliability but low validity, whereas perceptual measurements often possess a relatively low reliability but relatively high validity. For a sound quality metric the use of predictors supported by theoretical considerations and plausibility is very important. Furthermore a robustness analysis is needed indicating that the metric is not very susceptible to choice of input data. Be aware the use of statistics does not replace thinking; the use of predictors must be plausible or needs theoretical background