Place: Louisville, Kentucky/USA

Title: How to design Vehicle Alert Signals?

Session: "Acoustic Vehicle Alerts: Effects on Soundscape, Quality of Life, and Traffic Safety"

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Abstract:
E-Mobility becomes more and more popular. At the same time acoustical alert signals are requested by law. This is in conflict with less traffic noise and better environmental sound. Especially the request that the alert signals should contain tones and these tones should have frequency shift in dependency of speed can create disharmonic sounds e.g. if more than one vehicle is present. This will be a negative impact to the soundscape, the annoyance will increase. Different concepts of alert signal will be discussed with respect on detectability, localization and sound quality.