Abstract:
For quite a while the automotive industry has been working on assistance systems to improve safety and comfort of today's vehicles. In the course of this development combined with increasingly capable sensors, assistance systems have become more and more powerful. This whole development enlarges the role of the human, beginning from the actual driver of the car up to a supervisor of the automation state. On the one hand this leads to a relief in the driver's workload. On the other hand effects like out-of-the-loop and associated with that a loss of situation awareness can appear. Trying to solve this clash of objectives, the project "H-Mode" follows an idea of vehicle driving where the automation is capable of driving almost autonomous, but the driver is still kept active and in the loop by cooperating with the automation-system. The article describes the idea of cooperative driving and especially the H-Metaphor. Furthermore an example is given how this concept is used in the development of assistance and automation systems.