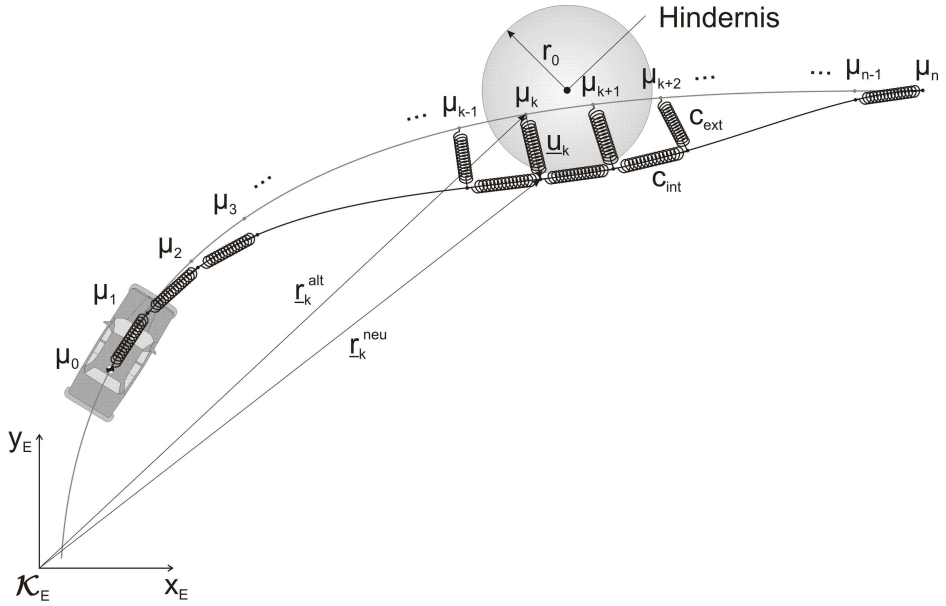
UNIVERSITÄT DUISBURG ESSEN — MECHATRONIK

Automotive Engineering

Advanced Driver Assistance Systems (Active Safety)

Area: Planning and execution of evasive manoeuvres

Person in charge: Gregor Hiesgen, Jeannette Heide

Duration: 2006 – 2010

Active Driver Assistance have a huge potential to reduce the number of serious and fatal accidents. Therein, collision avoidance and evasive methods make use of suitable sensors to identify and avoid potential dangers. The algorithms developed at the Chair of Mechatronics for planning the trajectories and path-following are based on the so-called Elastic Bands and Potential Fields. The evaluation of the system is realised on a scaled test vehicle and in a simulator.