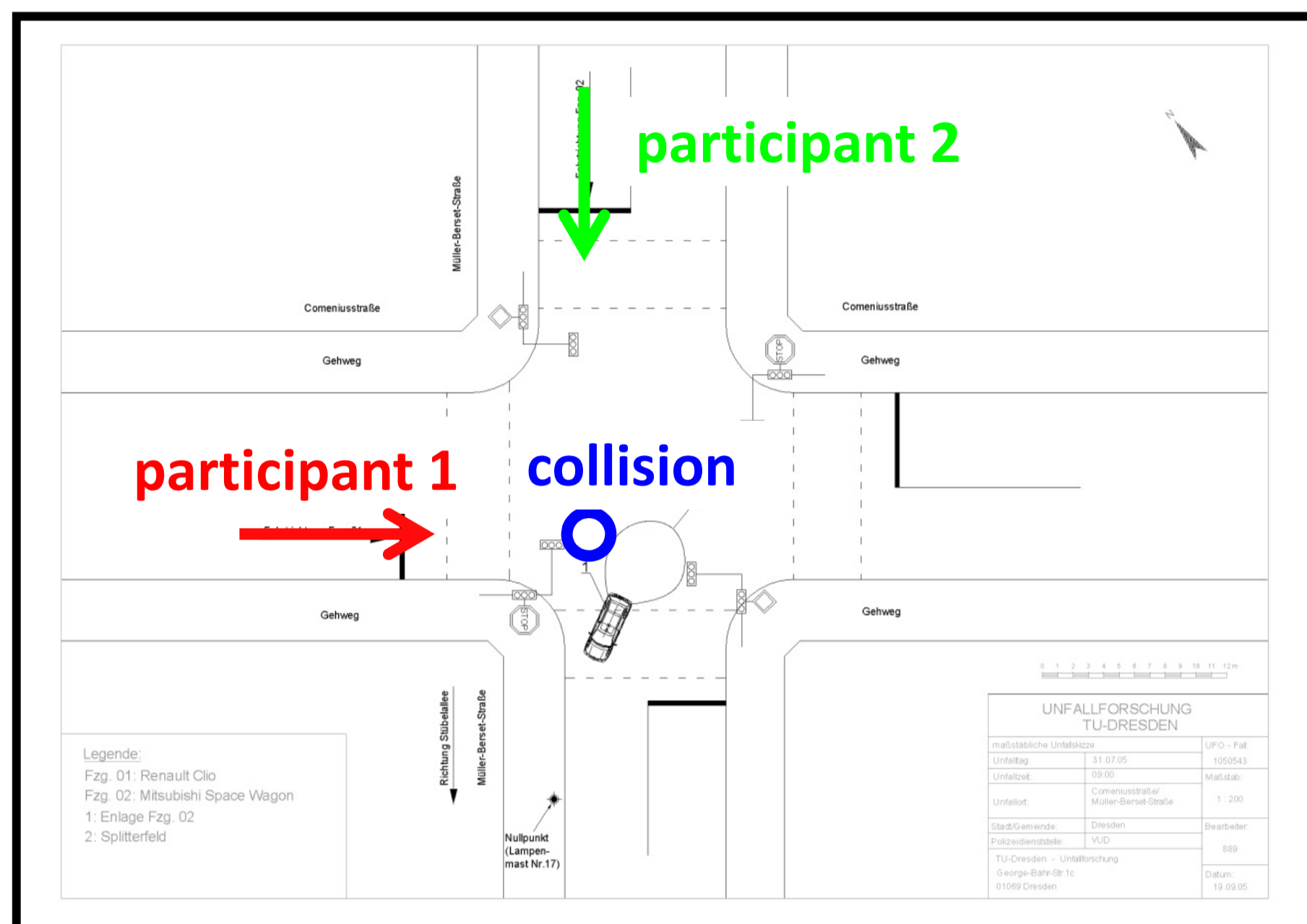


Design of 3D-Simulation Scenarios and Variation Using a Driver Model

3D Accident Scenario

2D Accident sketch

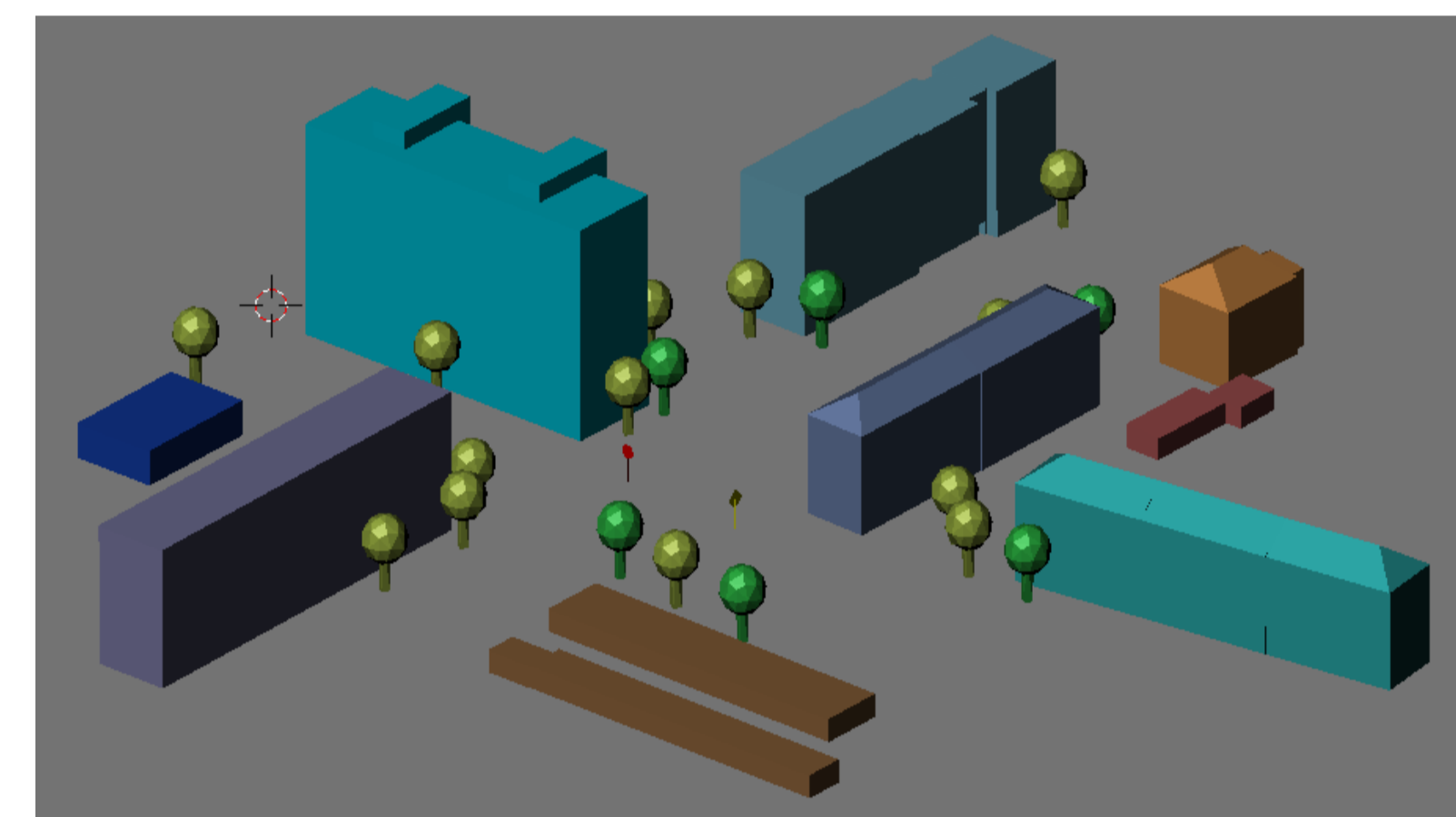
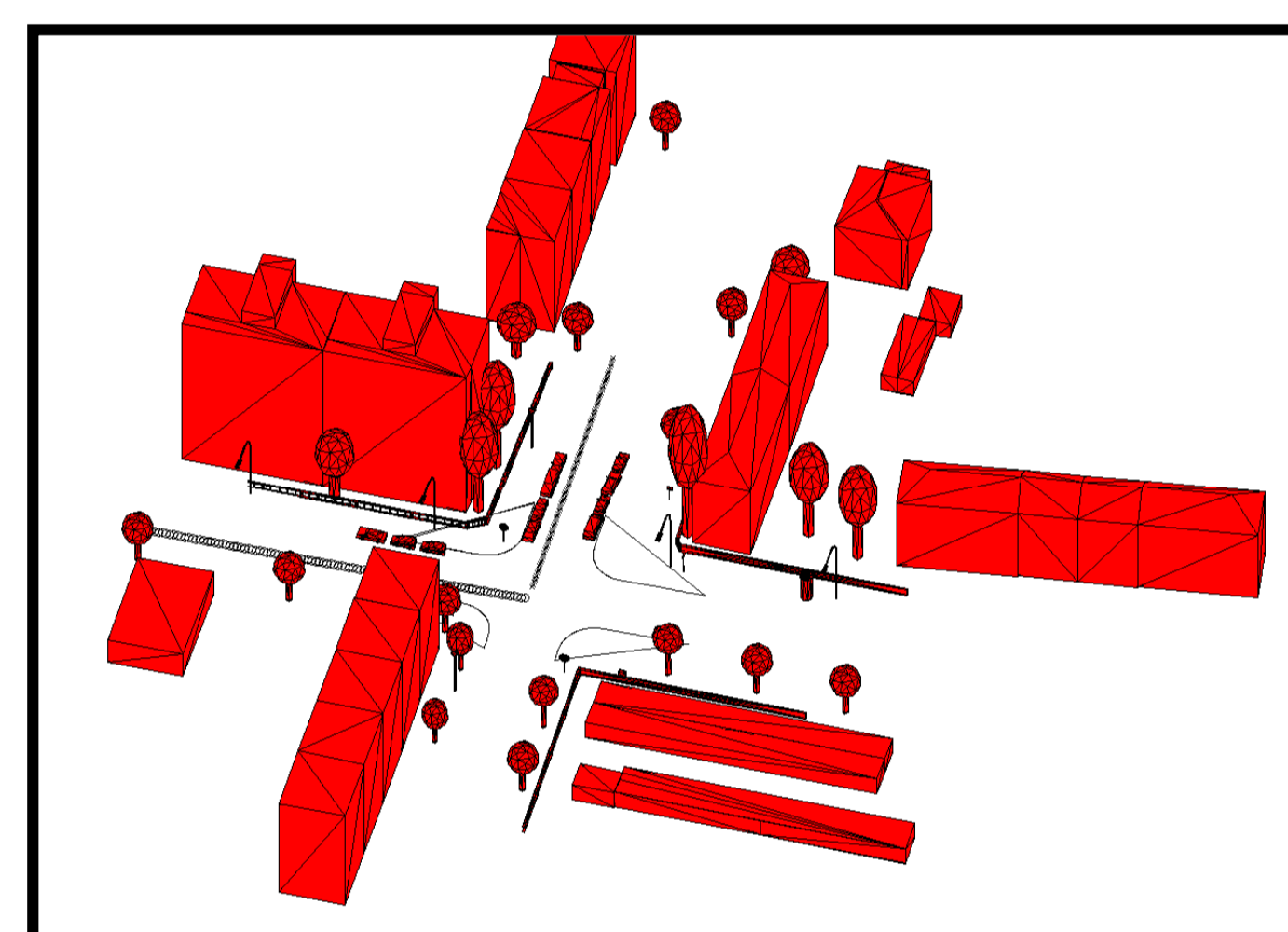


3D City model



[virtualcitysystems.de]

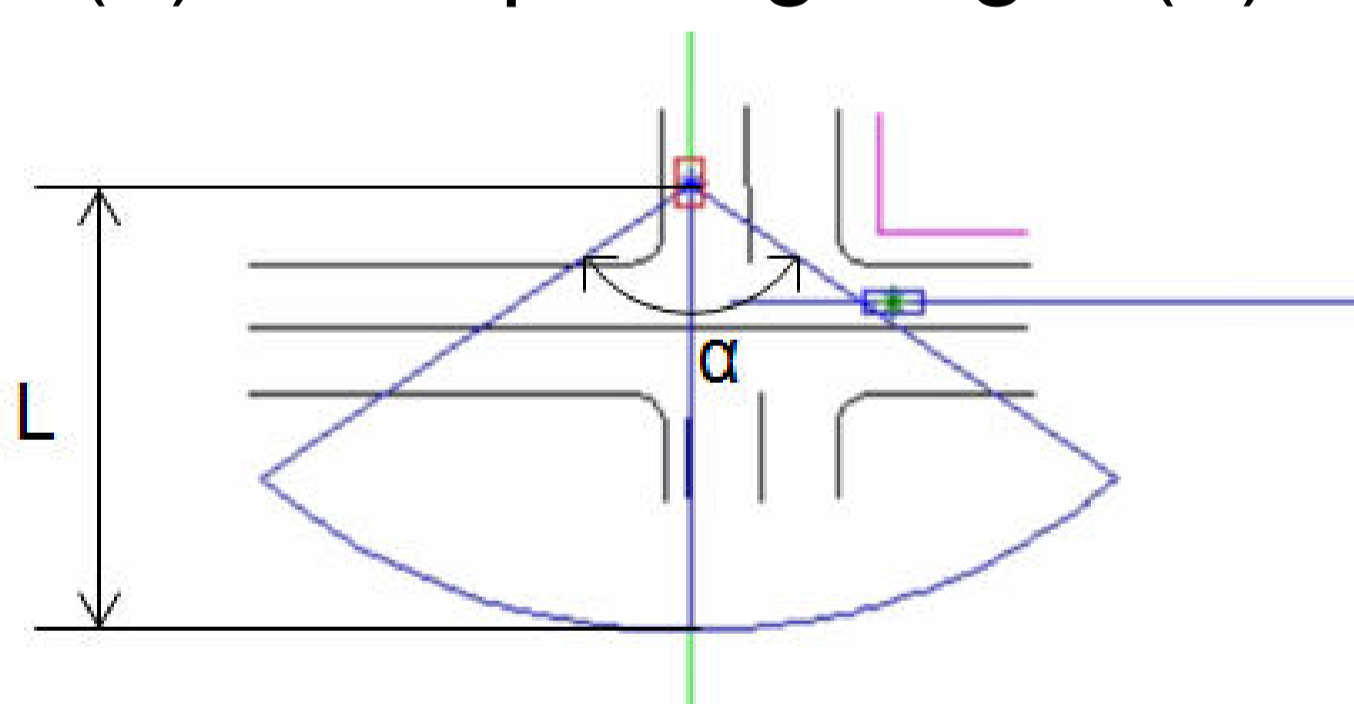
Structure



Driver Model

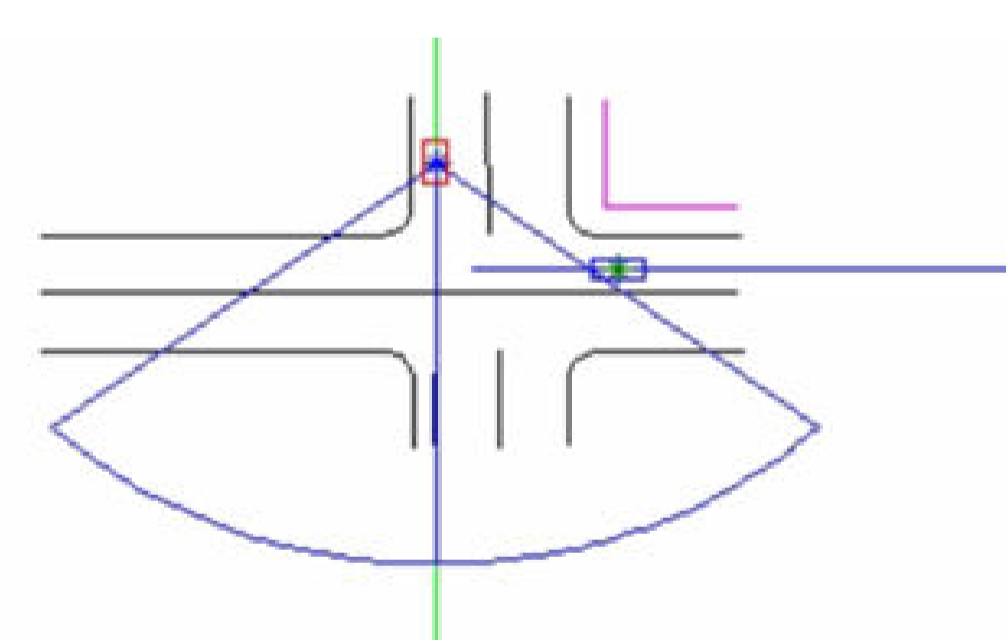
Definition

- Generation of the field of view, 3s before fixation
- Length (L) and opening angle (α) are speed-dependent

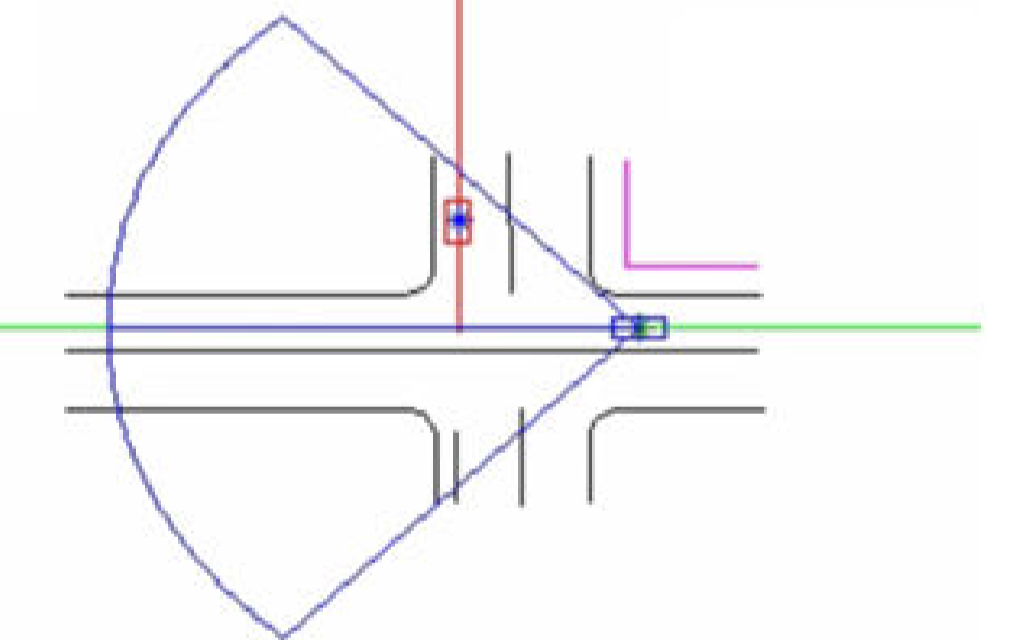


Simulation

- Simulation of driver's field of view for both vehicles
- Determination of the first eye contact to collision opponents



Time of first eye contact



Variation of Scenarios

Variation of ...

...reaction time [s]
(0.55 / 0.70 / 1.00)

...braking intensity [%]
(50 / 100)

For each case 2 basic simulations and 12 variations are available