Bosch Accident Research
Scientific crash analysis helps to identify road safety measures

- Integrated in Bosch Corporate Research
- Since 2005 crash & vehicle safety research
- Interdisciplinary team w/ 7 employees
  (Mathematicians, Physicists, Automobile- and Mechanical Engineers)

- Analysis and simulation of real world crash data
- Benefit assessment of all vehicle safety technologies
- Product strategy and sensor requirements
- International expansion to establish road safety
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onePASS – What does it mean to us?

► Why?
  • increasing complexity in evaluation of vehicle systems
    → simulations become method of choice
  • flexible tooling required
  • comparability and transparency: harmonising the simulation software (i.e. PEARs)

► How?
  • Yet: Matlab /Simulink, Perth, …

► Application?
  • benefit assessment of
    – advanced driver assistance systems
    – automated driving
  • Tool chain to assess injury severity
  • Support sensor requirement
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First application of openPASS within Bosch

- collaboration w/ Daimler, TU Dresden & TU Graz
- assess relevant, non-preventable accident scenarios on highways w/ high probability for large severity wrt highly automated driving
- implementation (e.g. sensor) and modification of openPASS modules

Data basis: 10,000 simulations (for this set-up) 3,617 collisions

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openPASS

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We are ready to contribute