

WORKSHOP

Technische Hochschule Ingolstadt

Virtual Development in Passive Safety Human Models for Future Mobility

September 25, 2025 – NTC, Teslova 5b, Pilsen, Room TC211

09:00 Registration & Technical Check

09:30 Welcome

09:35 Key-Note Session

Chair: Luděk Hynčík

- Child restraint system development within the framework of R129 Thomas Müller (CYBEX)
- Sled tests for virtual validation Petr Záruba (TÜV SÜD Czech)

10:25 Coffee Break

10:40 Block I of Scientific Presentations

Chair: Tomasz Bońkowski

- Numerical simulations of bus accident scenarios for safer transportation in Ghana Jan Vychytil (UWB)
- Comparative study of Virthuman model and Hybrid III performance in low-speed frontal impact and reclined posture Abbas Talimian (UWB)
- Computer simulation of injuries to a boy in the back seat of a passenger vehicle Petr Pavlata (VCA)
- Innovative crash box for interclass vehicle crashworthiness compatibility Luděk Hyčík (UWB)
- Panel Discussion
 All Presenters of Block I

12:20 Lunch-Break

13:20 Block II of Scientific Presentations

Chair: Ondřej Vaculín

- Consolidation of existing state-of-the-art methods for creating automated accident sketches using drone photos Alexander Hartmann (HM)
- Towards Smarter Protection: Concept for Adaptive Occupant Safety Systems
 Lennart Massarczyk and Lennard Reimers (THI)
- Towards the passive safety assessment of rearward-sitting occupants Ömer Dönmez (THI)
- Application of VIVA+ for rearward-sitting occupants Simona Klose (THI)
- Tensegerity elements in a new design of motorcyclist helmet Tomasz Bońkowski (UWB)
- Panel Discussion

 All Presenters of Block II

15:20 Wrap Up

15:40 Visit to NTC Facility

