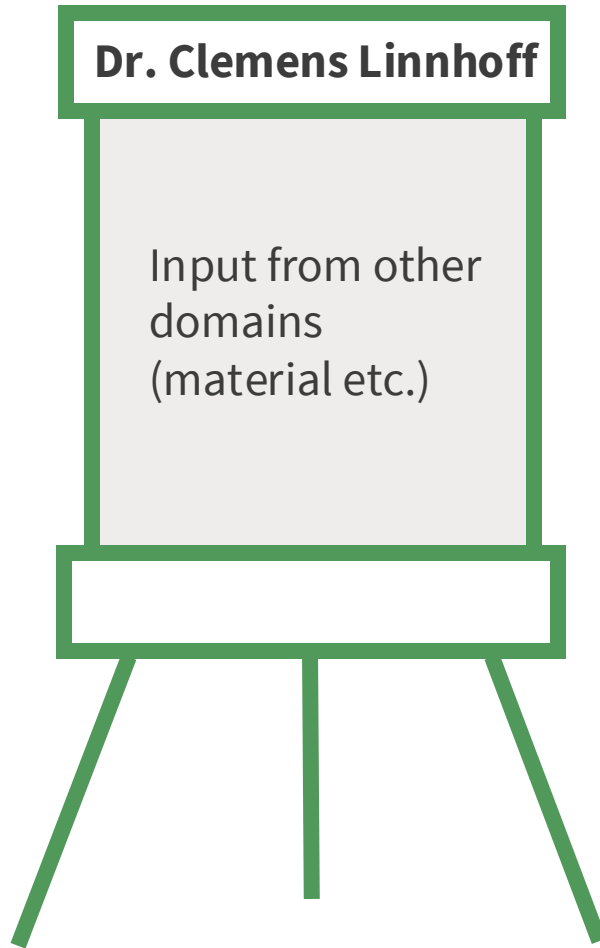


The workshops

How it works



QUESTION	ISSUES	IDEAS & SOLUTIONS	3 KEY TAKE AWAYS
What are the dependencies of simulation and sensor models along the data pipeline?	<ul style="list-style-type: none"> - Quality assessment of the downstream function is also hard - A lot of different functions (Object Detection/Tracking/Classification, Lane Keeping, Occupancy Grid, etc.) 	<ul style="list-style-type: none"> - Take a specific downstream function to assess simulation quality - Deduce requirements for the sensor model from the sensitivity of the downstream function 	<ol style="list-style-type: none"> 1) Requirements on sensor simulation are very specific to the downstream function 2) Benefit for assessment of downstream function: Simulation always provides ground truth
Which quality criteria are applied for material and geometry descriptions?	<ul style="list-style-type: none"> - Different level of detail needed. - A lot of materials - Environment changes over PLC (e.g. new car models on the roads) 	Look at Level of detail from sensor technology -> Camera needs different LODs than Radar	<ol style="list-style-type: none"> 1) Materials are wavelength dependent 2) Different sensor modalities need different levels of detail in the environment 3) There are too many materials in the real world which cannot all be measured. There must be some simplification or interpolation,
What can we learn from the quality metrics of real sensors?	<ul style="list-style-type: none"> - Timing - Production tolerances - Interfaces - Lab performance vs. real world 	Use sensor calibration metrics	<ol style="list-style-type: none"> 1) There are a lot of requirements on real sensors that can be compared to the simulation 2) Calibration metrics for real sensors can be used to compare calibration results to simulation