Safety Guarantees for Automated Vehicles

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Motivation

Set-based prediction of traffic participants



Figure: Predicted occupancies for $t \in [1.5 \text{ s}, 2.0 \text{ s}]$.

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Open Seminar Topics

- Occlusion
 - How can we consider what we cannot detect?
 - Your task: Literature review on the challenges through occlusion for automated vehicles
- Prediction of pedestrians
 - How can we efficiently and safely compute the future occupancy of pedestrians?
 - Your task: Literature review on prediction of pedestrians for automated vehicles
- Contact me for further details: markus.koschi@tum.de