Stochastic Methods for Long-Term Prediction

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Set-based prediction of traffic participants [1]



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

^[1] M. Koschi and M. Althoff, "SPOT: A tool for set-based prediction of traffic participants," in Proc. of the IEEE Intelligent Vehicles Symposium, 2017, pp. 1679-1686.



• Literature research on stochastic prediction

- Which prediction methods are suitable for long-term prediction?
- Start with e.g. [2] and [3]
- Understand stochastic motion prediction methods

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^[2] T. Gindele, S. Brechtel, and R. Dillmann, "Learning driver behavior models from traffic observations for decision making and planning," IEEE Intelligent Transportation Systems Magazine, vol. 7, no. 1, pp. 6979, 2015.

^[3] A. Eidehall and L. Petersson, "Statistical threat assessment for general road scenes using Monte Carlo sampling," IEEE Transactions on Intelligent Transportation Systems, vol. 9, pp. 137147, 2008.