

# Automated and Connected Driving Challenges

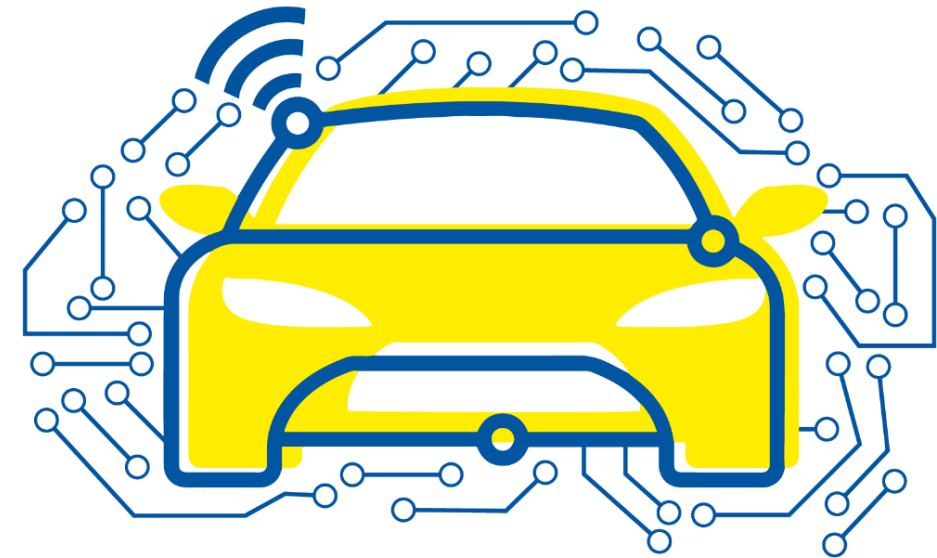
Section 3 – Object Fusion and Tracking

Introduction

Overview

Prof. Dr.-Ing. Lutz Eckstein

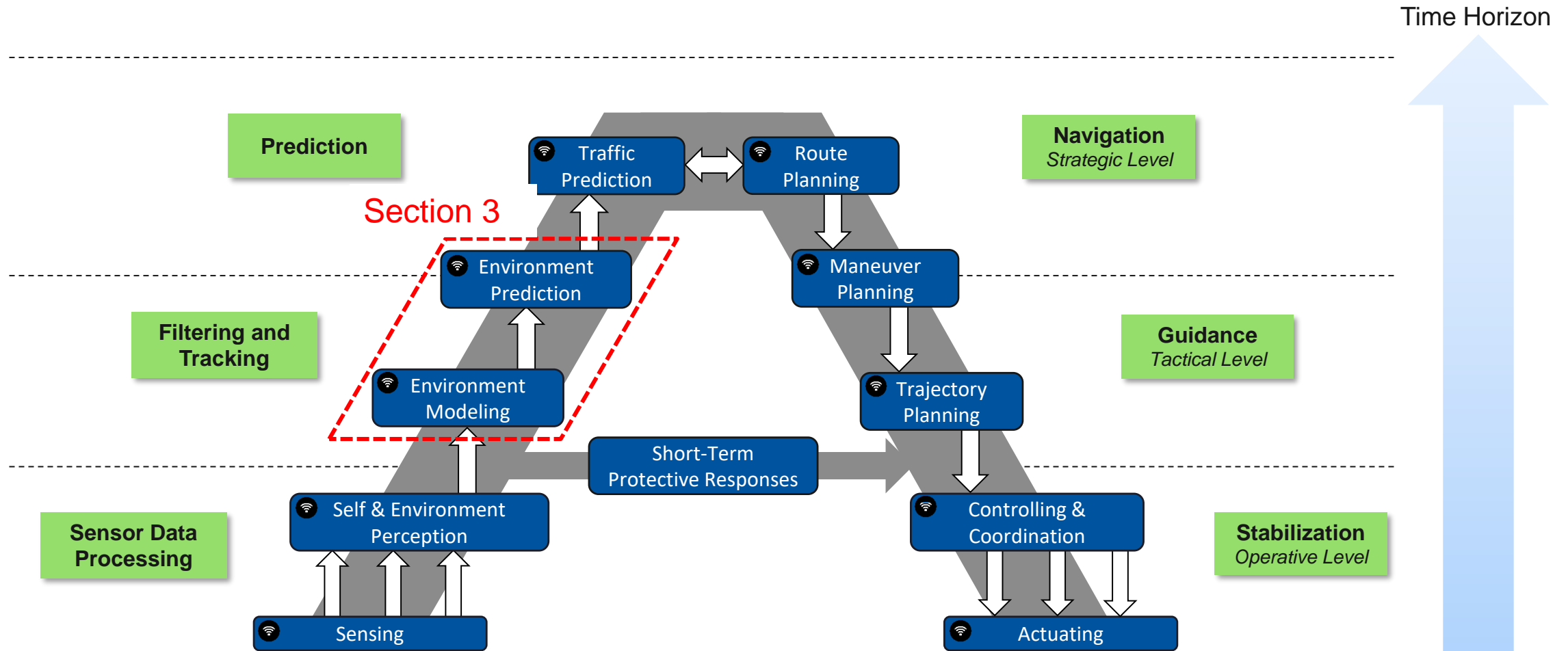
Institute for Automotive Engineering





# Structuring Automated Driving

## *The A-Model*





# Environment Modeling

## *Comprehensive Environment Model*

**Example** of a comprehensive environment model

### Object list (dynamic / online)

- road users / dynamic objects
- here cars blue, pedestrians pink
- output of tracking algorithm



### Occupancy grid map (dynamic / online)

- static objects
- here: occupied cells displayed with fixed height



### Digital HD map (static / offline)

- static environment
- created *prior* to driving task

Parametrized area for drivable space

Image: [Zoox](#)