

# High Accurate, Dynamic Maps for Highly Automated Driving: Generation, Updating and Optimized Provisioning

Motivation

## Ensure safety and comfort for highly automated cars

- Inbuilt sensors not reliable in all situations
  - weather, speed, ...
- Map as independent robust sensor needed as ground truth

Challenges

## Efficient and reliable data transmission constantly necessary

- Highly frequent map updates (traffic conditions, construction sides, ...)
- Transmission of sensor data to keep map updated
  - Bandwidth, provider charges, high mobility of nodes

Contributions

## Intelligent provision concept for high accurate maps

- Efficient context specific provisioning of map updates
- Generation of map updates through sensor data of cars
- Robust data transmission through intelligent cellular network measuring concepts

