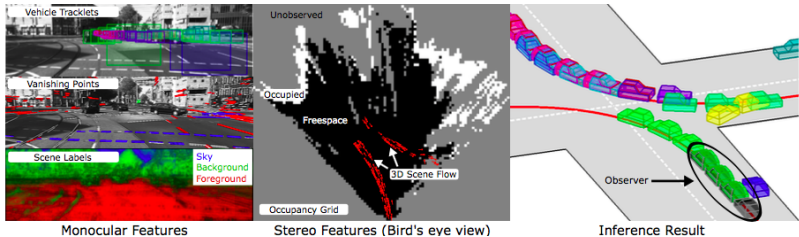


# 3D Traffic Scene Understanding from Movable Platforms

A. Geiger, M. Lauer, C. Wojek, C. Stiller, R. Urtasun (PAMI 2014)



- ▶ Presents a probabilistic generative model for multi-object traffic scene understanding from movable platforms
- ▶ Reasons jointly about the 3D scene layout as well as the location and orientation of objects in the scene
- ▶ Contributions:
  - ▶ Estimates the layout of urban intersections based on onboard stereo imagery alone
  - ▶ Does not rely on strong prior knowledge such as intersection maps
  - ▶ Infers all information from different types of visual features that describe the static environment of the crossroads & the motions of objects in the scene
- ▶ Evaluates on dataset of 113 video sequences of real traffic