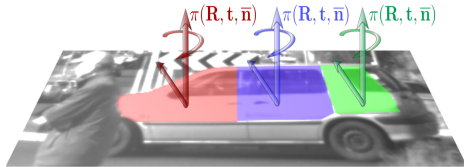


3D Scene Flow Estimation with a Piecewise Rigid Scene Model

C. Vogel, K. Schindler, S. Roth (CVPR 2015)



- ▶ Limitations of existing methods:
 - ▶ Conventional pixel-based representations require large number of parameters leading to challenging inference
 - ▶ Parameterize w.r.t. a single viewpoint and therefore may ignore important evidence present in other views
- ▶ Contributions:
 - ▶ Represents dynamic scenes as a collection of planar regions, each undergoing a rigid motion
 - ▶ Represents 3D shape and motion w.r.t. every image in a time interval while demanding consistency of the representations
- ▶ Evaluates on stereo and flow KITTI benchmarks