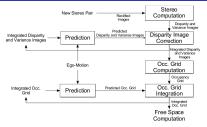# Free Space Computation Using Stochastic Occupancy Grids and Dynamic Programming

H. Badino, U. Franke,R. Mester (ICCV Workshop 2007)

- The free space is the world regions where navigation without collision is guaranteed

- Contributions:
  - Presents a method for the computation of free space with stochastic occupancy grids
  - Stereo measurements are integrated over time reducing disparity uncertainty.
  - These integrated measurements are entered into an occupancy grid, taking into account the noise properties of the measurements
  - Defines three types of grids and discusses their benefits and drawbacks
  - Applies dynamic programming to a polar occupancy grid, to find the optimal segmentation between free and occupied regions

- Evaluates on stereo sequences introduced in the paper