

## 1 Results

## 2 To do's

- Set up an IDE to run ROS nodes **Now the Qtcreator is set and variables can be displayed**
- Explore the **navigation** pkg and the **subpackages**. Make a small descriptive file - **TO DO 16/Oct**
- Create a bag file to read the robot trajectory + Matlab script to read the infos - **TO DO 16/Oct**
- Find the topic by which the robot publishes its **local trajectory**, then find the way to modify the frequency rate to which the local path is being published. Understand also if this is in the reference frame of the **odom** or in the **amcl**, so **map** frame.

## 3 Achieved

## 4 The working Global planner as plugin in ROS - general considerations

The global planner plugin has been written such that the robot follows a zig-zag trajectory. The vector **plan** is filled in the correct manner, already debugged with the Qt-debugger, however the robot jumps in coordinates. The first straight path is correctly followed, but then instead of turning left, the robot follows a diagonal path and "cuts" the corners of the theoretical designed trajectory. Now making the bag files

topic move\_base/..../globalpath - gives the global path designed

## 5 Exploring the navigation pkg component

Main components:

- **base\_local\_planner** The
- **clear\_costmap\_recovery**
- **costmap\_2d**
- **dwa\_local\_planner**
- **global\_planner**

There are others, for now let us concentrate on the one responsible to plan the robot's trajectory.