Camera Intrinsics Calibration Check

To check that the intrinsics calibration has been effected correctly, you will need to print the image of the aruco marker below:
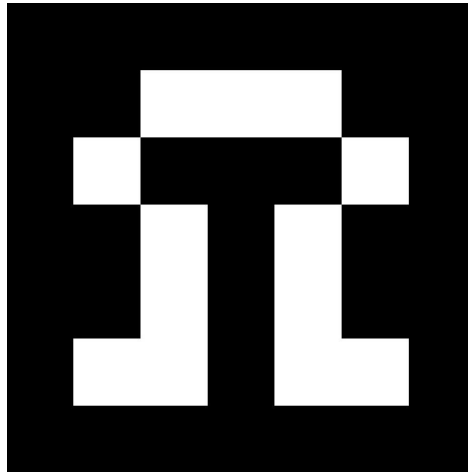

Figure 1: Aruco marker

Place the image in front of the TIAGo camera and open the following in three different terminals:

```
Unset
export ROS_MASTER_URI=http://|robothost|:11311
rosrun aruco_ros marker_publisher
/camera_info:=/xtion/rgb/camera_info
/image:=/xtion/rgb/image_rect_color _marker_id:=582
_marker_size:=0.045  _camera_frame:=/xtion_optical_frame
_image_is_rectified:=true _reference_frame:=/base_footprint
```

```
Unset
export ROS_MASTER_URI=http://|robothost|:11311
rosrun rqt_image_view rqt_image_view
image:=/aruco_marker_publisher/result/compressed
```

```
Unset
ssh pal@|robothost|
pal-stop head_manager
rostopic echo /aruco_marker_publisher/markers
```

When TIAGo detects the aruco marker, you will see something like this:

Figure 2: Output in terminal after commands

Note down the initial values from x, y and z. Then move the aruco marker 10 cm to the right (X axis), to the back (Y axis) and upwards (Z axis) and make sure that the errors (difference between the initial and new values) are less than 0.3. If that is the case, you can consider your intrinsics calibration successful.