# 2024 11 17 12:30

#### rosout

```
ros@amdc:~/sigyn_ws$ ros2 launch line_finder line_finder.launch.py
[INFO] [launch]: All log files can be found below /home/ros/.ros/log/2024-11-17-12-25-19-67
[INFO] [launch]: Default logging verbosity is set to INFO
[INFO] [lf-1]: process started with pid [80182]
[lf-1] [INFO] [1731875119.757711337] [LineExtractionROS]: bearing_std_dev: 0.001000
[lf-1] [INFO] [1731875119.757753318] [LineExtractionROS]: frame_id: base_link
[lf-1] [INFO] [1731875119.757757408] [LineExtractionROS]: least_sq_angle_thresh: 0.000100
[lf-1] [INFO] [1731875119.757760978] [LineExtractionROS]: least_sq_radius_thresh: 0.000100
[lf-1] [INFO] [1731875119.757764408] [LineExtractionROS]: max_line_gap: 0.400000
[lf-1] [INFO] [1731875119.757768128] [LineExtractionROS]: max_range: 20.000000
[lf-1] [INFO] [1731875119.757772478] [LineExtractionROS]: min_line_length: 0.500000
[lf-1] [INFO] [1731875119.757775998] [LineExtractionROS]: min_line_points: 9
[lf-1] [INFO] [1731875119.757779209] [LineExtractionROS]: min_range: 0.400000
[lf-1] [INFO] [1731875119.757782579] [LineExtractionROS]: min_split_dist: 0.050000
[lf-1] [INFO] [1731875119.757785909] [LineExtractionROS]: outlier_dist: 0.050000
[1f-1] [INFO] [1731875119.757789379] [LineExtractionROS]: publish markers: True
[lf-1] [INFO] [1731875119.757792759] [LineExtractionROS]: range_std_dev: 0.020000
[lf-1] [INFO] [1731875119.757796329] [LineExtractionROS]: scan topic: scan
```

### Room corners

corner	X	У
lower-left	-1.44	-2.43
upper-left	-1.44	1.02
upper-right	1.62	1.02
lower-right	2.35	-2.43
south-wall-bottom	1.6	-0.953
south-wall-top	1.6	0.144
closet-top	2.33	-1.47
hallway-bottom	2.58	0.623

### Lines

line#	radius	angle	$start\_x$	$start\_y$	$end\_x$	$end\_y$
1	1.5732	-3.1411	-1.5732	-0.0025	-1.5720	-2.2624
2	2.4229	-1.5708	-1.5632	-2.4229	1.9161	-2.4229

line#	radius	angle	start_x	start_y	end_x	end_y
3	2.2152	-0.0020	2.2104	-2.4215	2.2119	-1.6418
4	1.4761	-0.0021	1.4742	-0.9401	1.4762	0.0387
5	2.4704	0.0051	2.4671	0.6391	2.4630	1.4537
6	1.0319	1.5710	1.4882	1.0322	-1.4170	1.0316
7	1.5727	3.1415	-1.5726	1.0253	-1.5727	0.0851

# line segments (w/o covaiances)

ros@amdc:~/sigyn\_ws\$ ros2 topic echo -f /line\_segments header: stamp: sec: 1731875310 nanosec: 29216355 frame id: base link line segments: 1.5731842517852783 angle: -3.141079902648926 start:  $1.5731832124260363 - -0.002504770104957132 \ \mathrm{end:} \ - -1.5720241713737517 - -0.002504770104957132 \ \mathrm{end:} \ - -0.00250470104957132 \ \mathrm{end:} \ - -0.00$ -2.2624262572378218 - radius: 2.422900915145874 angle: -1.5707900524139404 $start: -1.5632248344342086 - -2.4229108784365363 \ end: -1.9161268102881142 - -1.916126810288114 - -1.916126810288114 - -1.916126810288114 - -1.916126810288114 - -1.916126810288114 - -1.916126810288114 - -1.916126810288114 - -1.916126810288114 - -1.916126810288114 - -1.916126810288114 - -1.916126810288114 - -1.916126810288114 - -1.916126810288114 - -1.916126810288114 - -1.9161268108811 - -1.9161268108811 - -1.9161268108811 - -1.9161268108811 - -1.9161268108811 - -1.9161268108811 - -1.9161268108811 - -1.9161268108811 - -1.9161268108811 - -1.9161268108811 - -1.9161268108811 - -1.9161268108811 - -1.9161268108811 - -1.91612681081 - -1.9161268108811 - -1.9161268108811 - -1.91612681081 - -1.91612681081 - -1.91612681081 - -1.91612681081 - -1.91612681081 - -1.91612681081 - -1.91612681081 - -1.91612681081 - -1.91612681081 - -1.91612681081 - -1.91612681081 - -1.91612681081 - -1.91612681081 - -1.9161881081 - -1.9161881081 - -1.9161881081 - -1.9161881081 - -1.9161881081 - -1.9161881081 - -1.9161881081 - -1.916188181081181 - -1.9161881081818181 - -1.9$  $-2.42288886099247 - {\rm radius:} \ \ 2.215196371078491 \ {\rm angle:} \ \ -0.0020027810242027044$ 1.6418318147626523 - radius: 1.4760946035385132 angle: -0.0020574999507516623start: -1.4741635008614258 - -0.9400960473350228end: -1.4761774202059867 -0.038721218066253386 - radius: 2.470355272293091 angle: 0.005100329872220755start: - 2.467127685829509 - 0.6390924511928237 end: - 2.462972972085274 - $1.4536824775297292 - {\rm radius:} \ 1.031854510307312 \ {\rm angle:} \ 1.5710093975067139$ start: - 1.4881534123031583 - 1.0321715942988485 end: - -1.4170065551510962- 1.0315526614842032 - radius: 1.572725534439087 angle: 3.14148211479187start: -1.5726122199192905 - 1.0253445565552337 end: -1.572716162949457 -0.08511851324959645

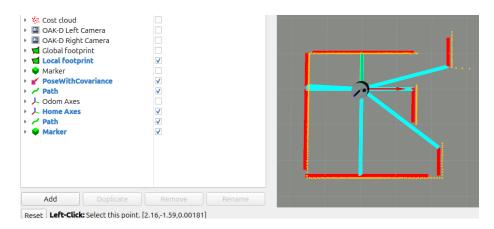


Figure 1: alt text