

## Chat record for RBNV - 04/21/2020

00:01:43.435,00:01:46.435

7 photons: I've got a quick demo of the lidar sensor tracking the wall

00:28:24.413,00:28:27.413

doug paradis: link for Maix Dock - [https://smile.amazon.com/seeed-studio-Sipeed-OV2640-Computing/dp/B07V9L3RPK/ref=sr\\_1\\_2?dchild=1&keywords=maix&qid=1587494444&sr=8-2&th=1](https://smile.amazon.com/seeed-studio-Sipeed-OV2640-Computing/dp/B07V9L3RPK/ref=sr_1_2?dchild=1&keywords=maix&qid=1587494444&sr=8-2&th=1)

00:46:07.553,00:46:10.553

Carl Ott: I'm hearing Murray wants to do a Velocity control loop

00:46:17.402,00:46:20.402

Carl Ott: So reference setpoint is velocity

00:46:43.051,00:46:46.051

Carl Ott: and feedback is measured from encoders also in velocity

00:47:10.967,00:47:13.967

Carl Ott: but output of control loop is (typically) PWM commands to motor H-Bridge

00:48:59.798,00:49:02.798

Carl Ott: and a fixed sample rate of 20 ms

00:57:37.251,00:57:40.251

Carl Ott: Brett Beauregard gives a nice walk through PID - starting with a simple version and then layering on complexity

00:57:38.540,00:57:41.540

Carl Ott: <http://brettbeauregard.com/blog/2011/04/improving-the-beginners-pid-introduction/>

00:58:07.319,00:58:10.319

Murray Altheim: Yes, this was the blog entries that I used for my Arduino port

01:00:19.820,01:00:22.820

Carl Ott: he does talk about windup and reset

01:00:20.690,01:00:23.690

Carl Ott: <http://brettbeauregard.com/blog/2011/04/improving-the-beginner%e2%80%99s-pid-reset-windup/>

01:24:49.492,01:24:52.492

Carl Ott: Here is my library for Raspberry PI as SPI Master, to command an Arduino Mega 2560 as SPI Slave. Be sure to check out the latest commit - as of today that's on the "loopback" branch <https://github.com/cottjr/piMegaSPI>

01:29:25.253,01:29:28.253

7 photons: I've got to go, stay safe.

01:29:36.024,01:29:39.024

Carl Ott: G'night Jack - you too!