

ECE 430

Laura and Joshua

LAB 4

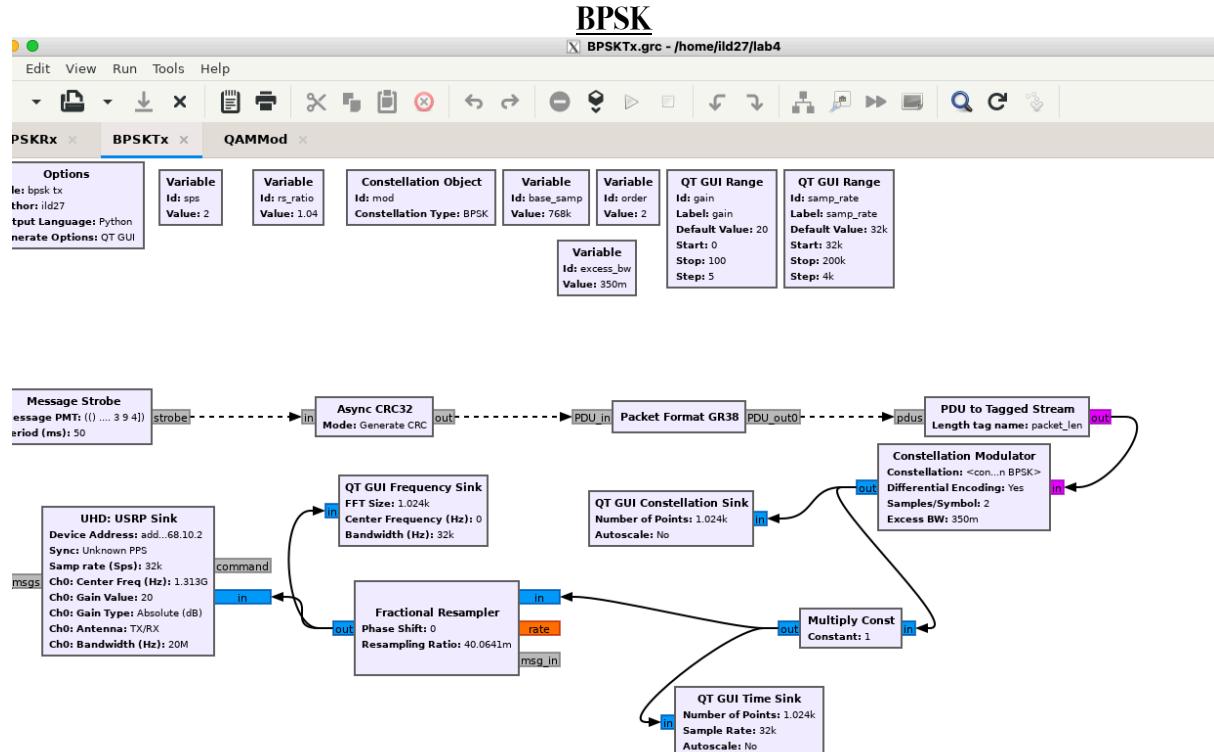
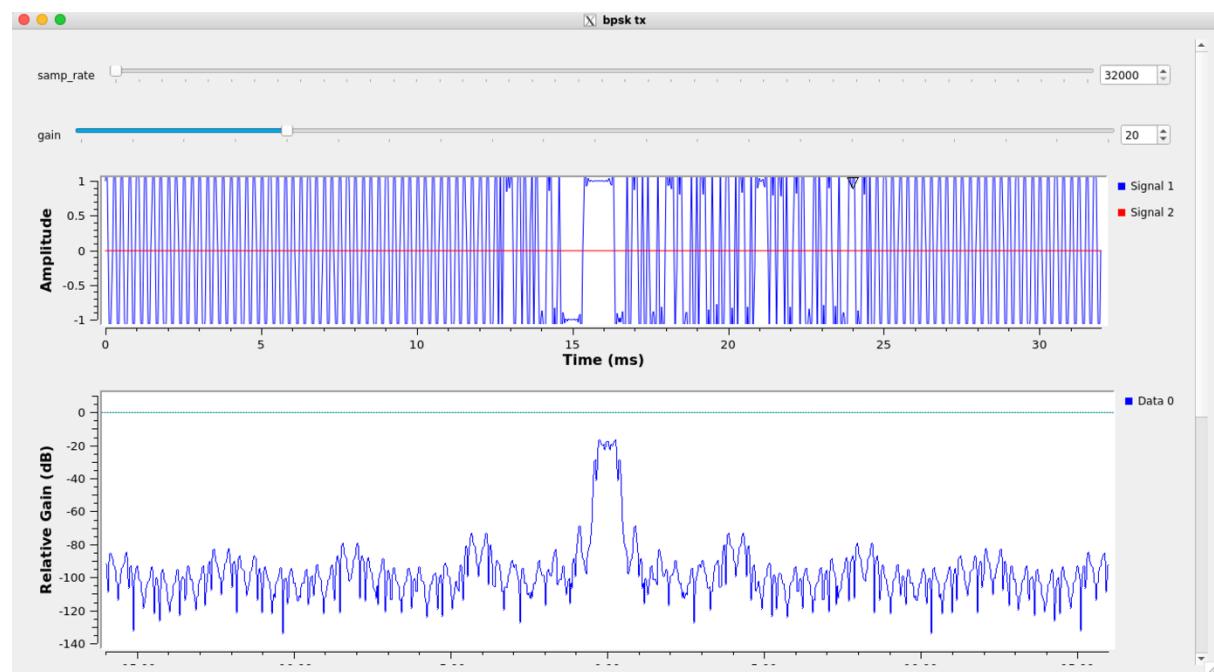


Figure 1: BPSK Tx grc



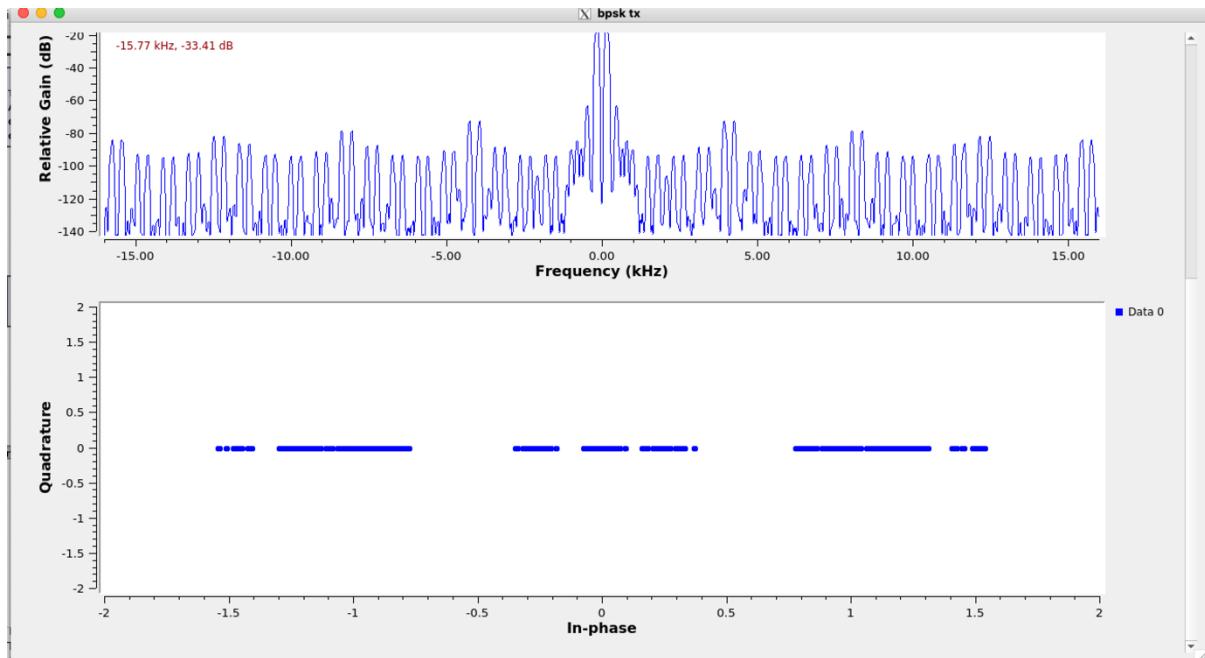


Figure 2(a & b): the constellation plot, the modulated signal, and the transmitted signal.

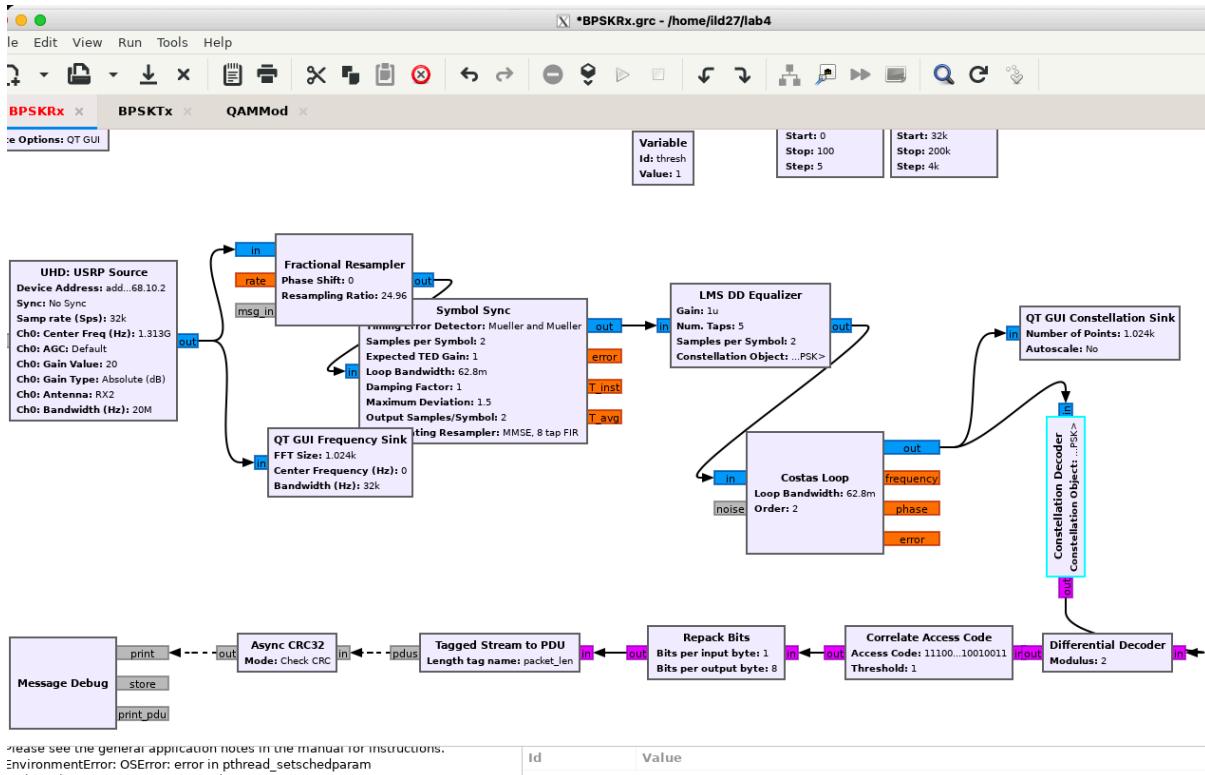


Figure 3: BPSK Rx grc

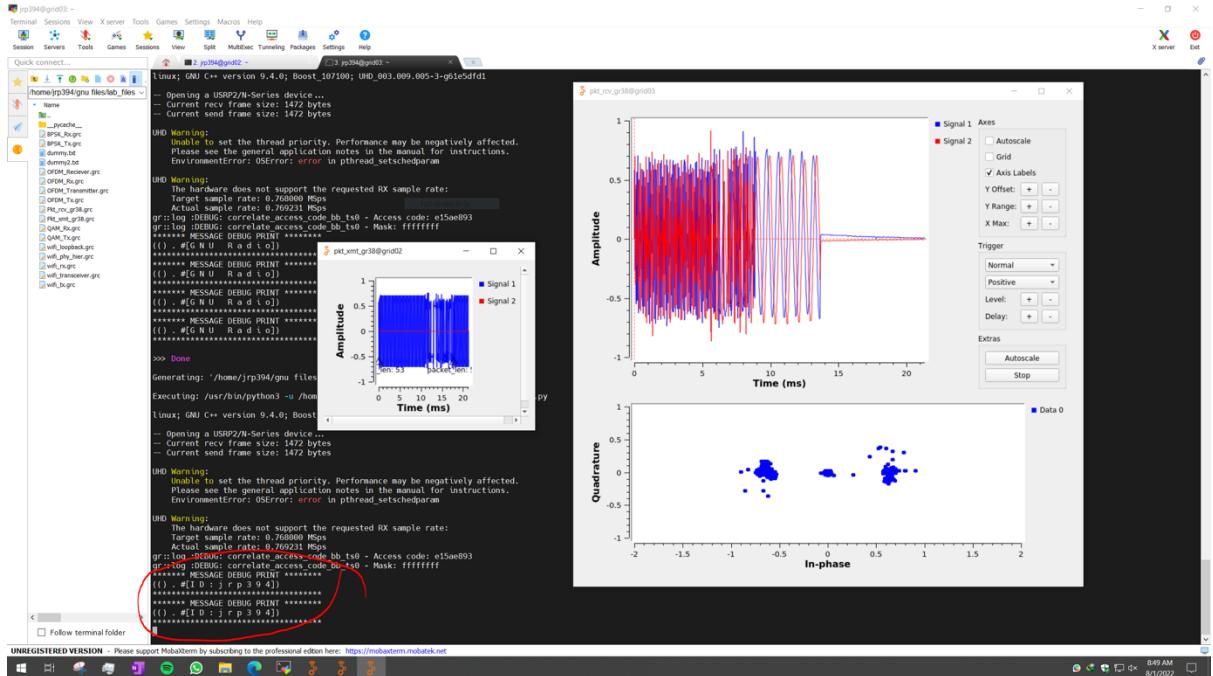


Figure 6: BPSK Rx, showing received message. We were only able to transmit a message if we had a 9-character message. The exact reason we were facing this problem is unknown.

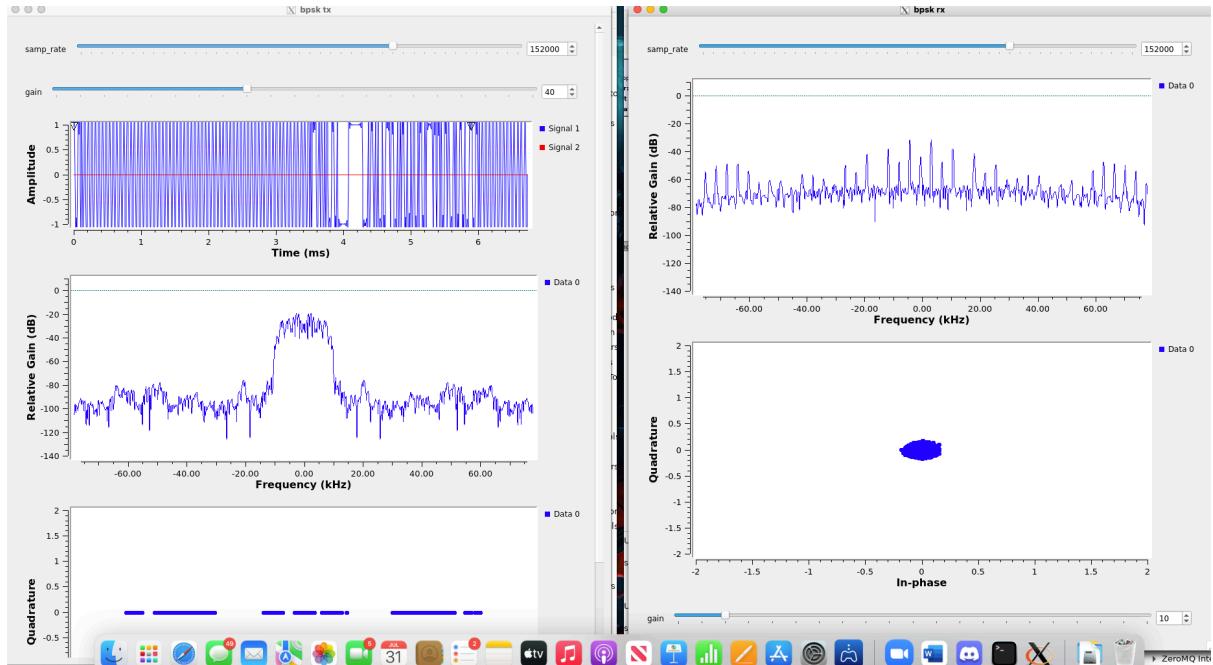


Figure 5: BPSK Tx/Rx without LMS DD

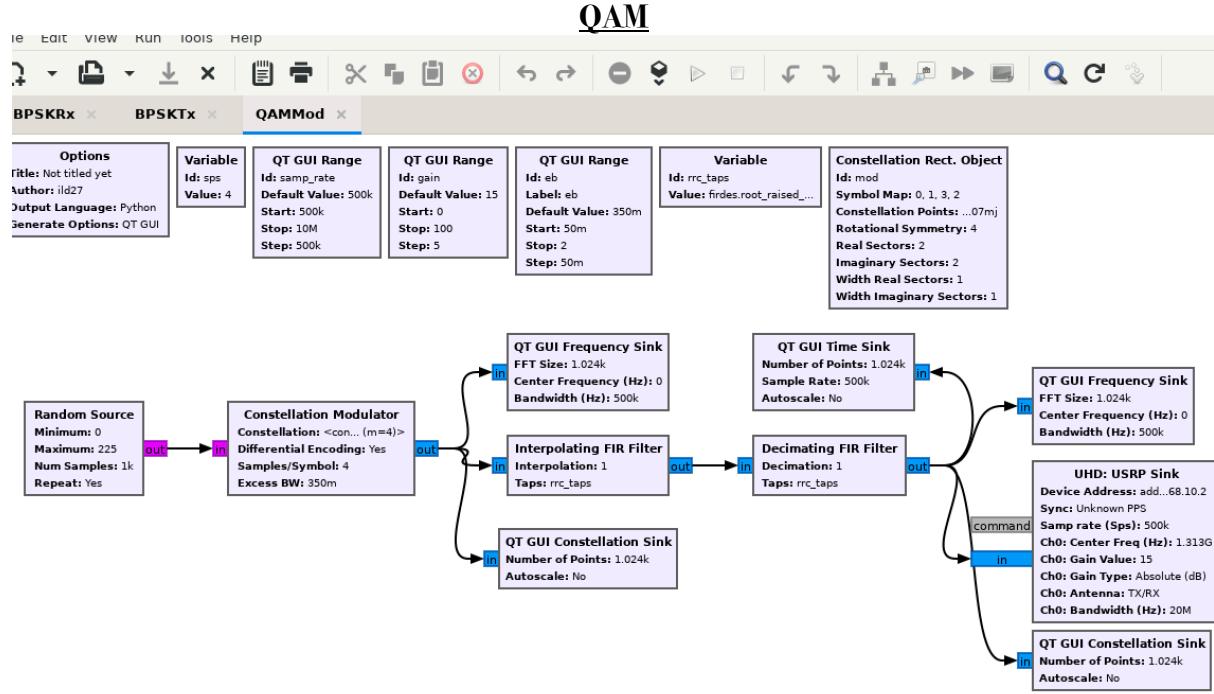


Figure 7: QAM Modulation grc

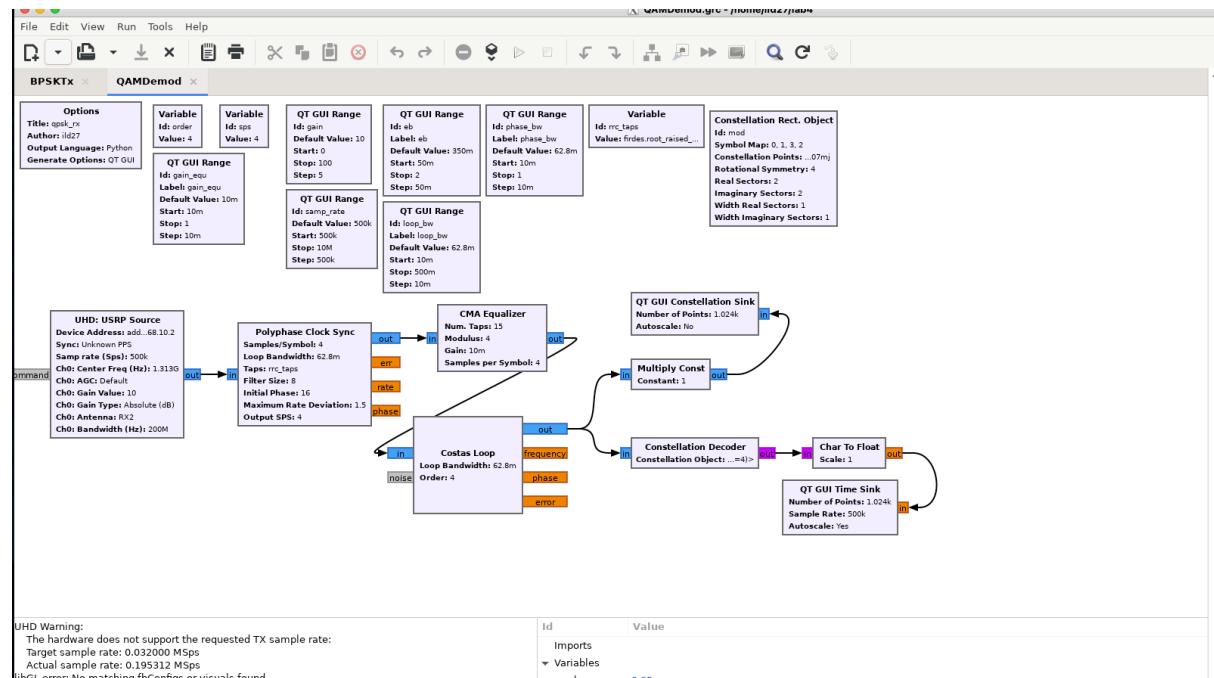


Figure 8: QAM Demodulation grc

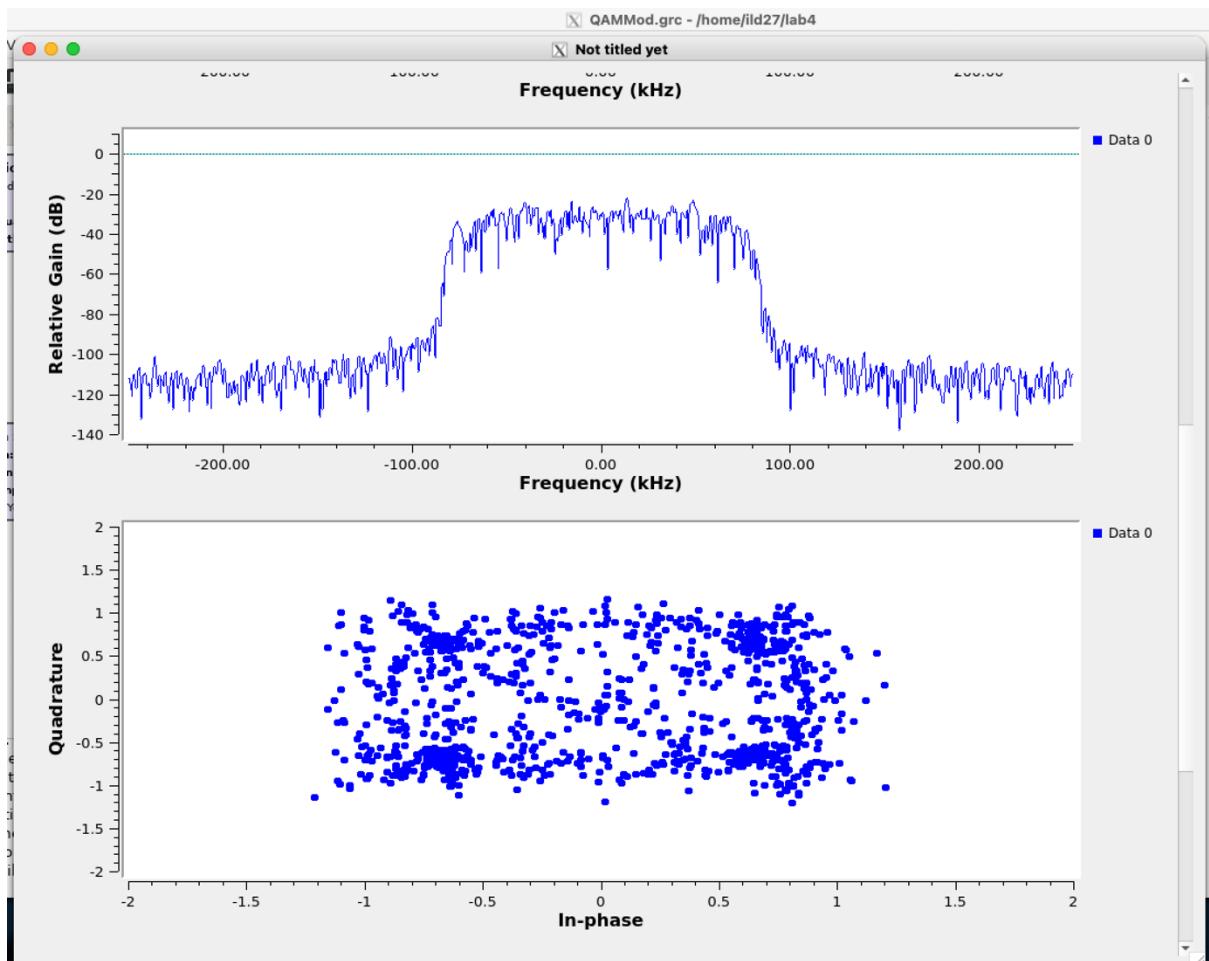


Figure 9: Constellation without polyphase clock

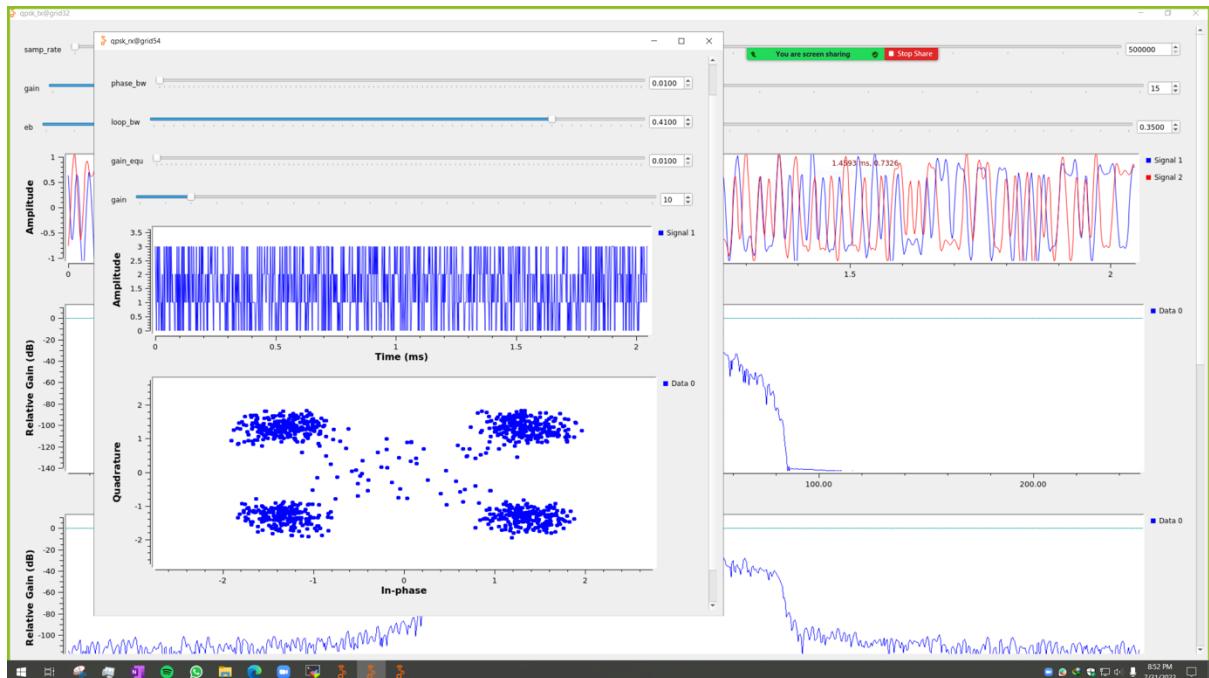


Figure 10: Constellation with polyphase clock

Wi-Fi

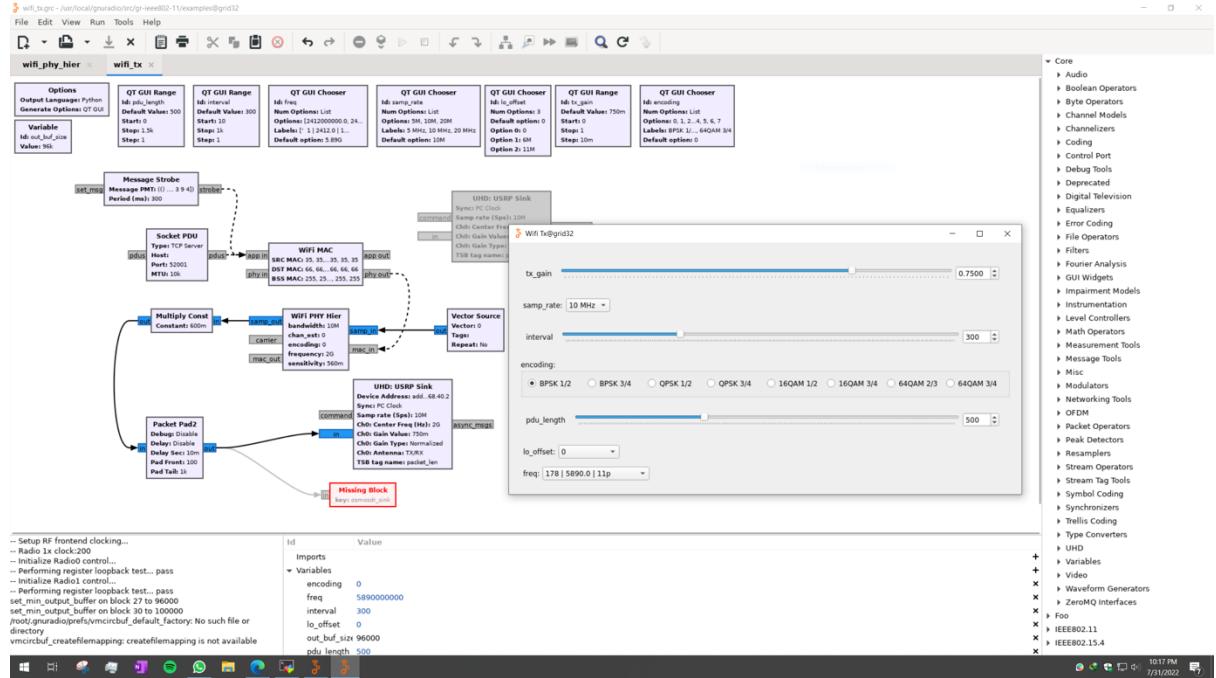


Figure 11: Wi-Fi Tx grc

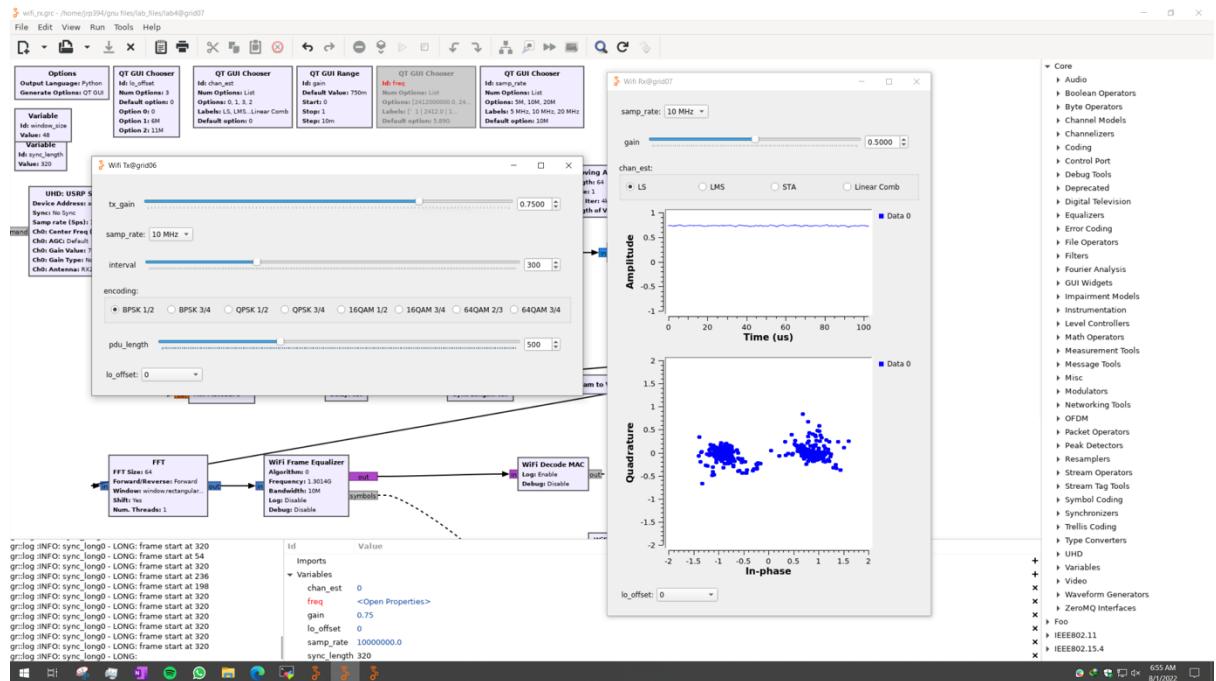


Figure 12: Wi-Fi Rx grc, showing ideal configuration to maximise our transmission rate.

OFDM

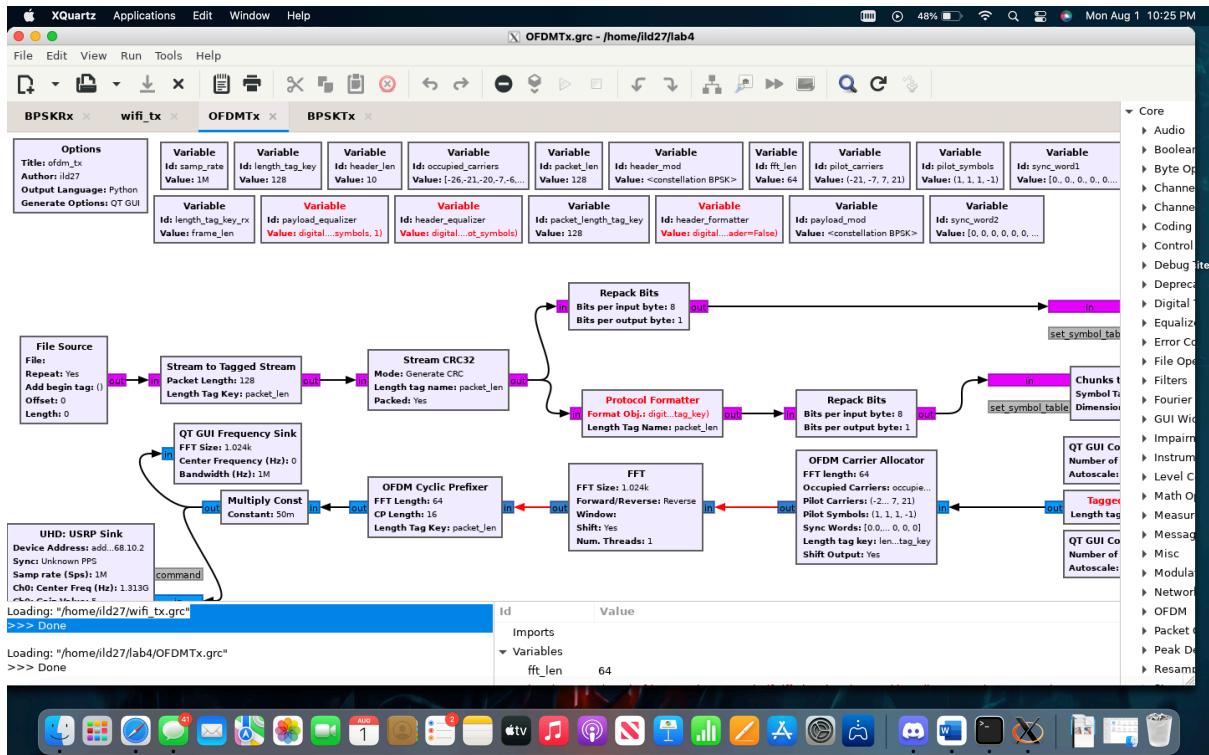


Figure 13: OFDM Tx grc

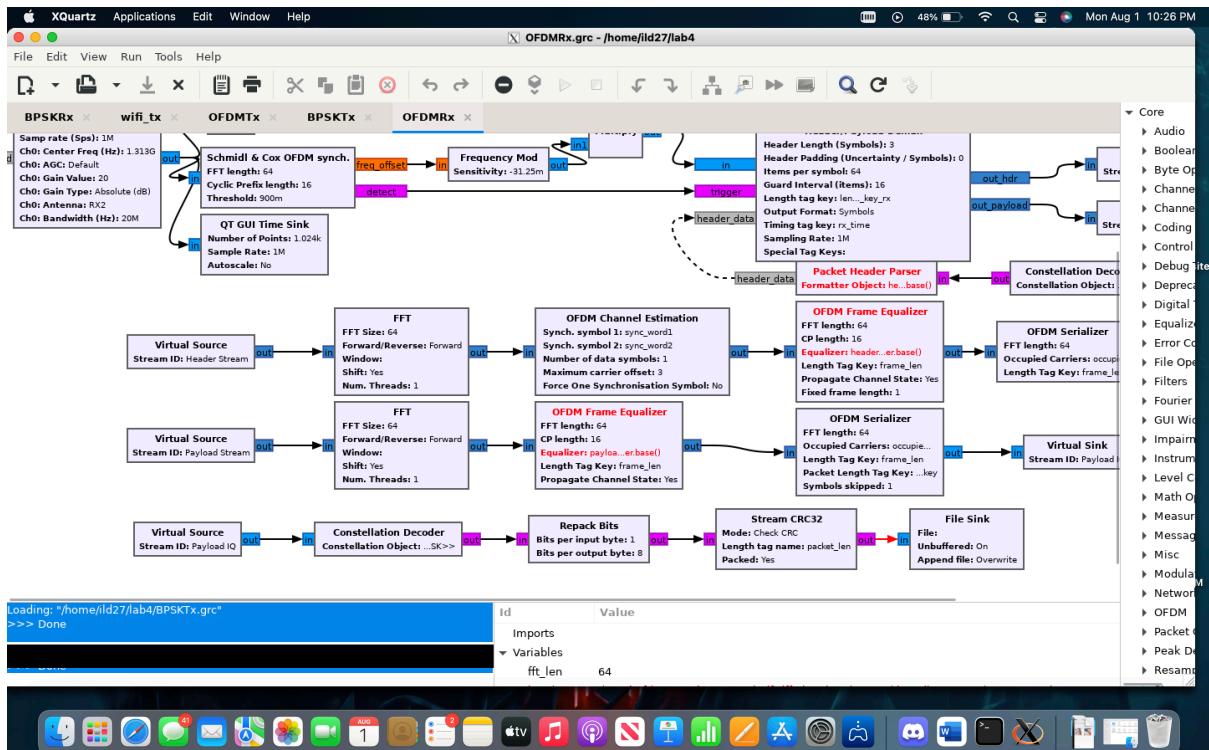


Figure 14: OFDM Rx grc