**Options**
**Title:** Transmitting_Signal
**Author:** David Venegas
**Description:** Simul...Receiver
**Output Language:** Python
**Generate Options:** QT GUI

**Variable**
**Id:** samp_rate
**Value:** 32k

**Variable**
**Id:** sps
**Value:** 4

**Variable**
**Id:** excess_bw
**Value:** 350m

**Random Source**
**Minimum:** 0
**Maximum:** 255
**Num Samples:** 10k
**Repeat:** Yes

out

in

**Constellation Modulator**
**Constellation:** <con... (m=4)>
**Differential Encoding:** Yes
**Samples/Symbol:** 4
**Excess BW:** 350m

out

in

**Throttle**
**Sample Rate:** 32k

out

**Constellation Rect. Object**
**Id:** QPSK
**Symbol Map:** 0, 1, 2, 3
**Constellation Points:** ...07mj
**Rotational Symmetry:** 4
**Real Sectors:** 2
**Imaginary Sectors:** 2
**Width Real Sectors:** 1
**Width Imaginary Sectors:** 1

in0

in1

freq

bw

**QT GUI Frequency Sink**
**FFT Size:** 1.024k
**Center Frequency (Hz):** 0
**Bandwidth (Hz):** 32k

freq

**Decimating FIR Filter**
**Decimation:** 1
**Taps:** root_raise_cosine

in

out

**Variable**
**Id:** root_raise_cosine
**Value:** firdes.root_raised_...

in0

in1

**QT GUI Time Sink**
**Number of Points:** 200
**Sample Rate:** 32k
**Autoscale:** No

in0

in1

**QT GUI Constellation Sink**
**Number of Points:** 4.096k
**Autoscale:** No