

# Lab Notes

Capacitor:  $48.5 \text{ nF}$

Resistance of signal generator:  $50 \Omega$

## Experiment 1

$$V_{in} = 0.999$$

### Trial 1

n	-1	0	1	2	3	4	5	6	7
voltage	-8.2	5.4	-5.6	4.2	-4.6	3.4	-3.8	2.6	-3

There's a weird spike at the start

### Trial 2

V	n	-1	0	1	2	3	4	5	6	7	8	9	10
		-8.4	5.4	-5.6	4.2	-4.6	3.2	-3.8	2.6	-3.2	2	-2.6	1.6

### Trial 3

~~Trial~~

$$L = 3.186 \text{ mH}$$

Voltmeter measures  $V_{rms}$

Frequency knob  $\pm 0.4 \mu\text{s}$

$$\text{Multimeter (V)} = \pm 0.0005 \text{ V}$$

$$(\text{mV}) = \pm 0.05$$

AD