**One Page Update**

Project: Chua’s Circuit

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Progress:

* We successfully programmed a plot of Chua’s circuit, and also animated Chua’s circuit in Python’s pylab and visual modules
* We successfully identified multiple attractors that could appear with Chua’s circuit, namely the double scroll, the chaotic attractor, the stable limit cycle and hyperbolic periodic orbit
* As we experiment with different initial conditions, we found out that there would be points on the graph where the trajectory would be “sucked into” the double scroll attractor
* Under Professor Wolf’s advice, we successfully found the lyanupov exponent of the time series of the graphs , which showed a smooth exponential curve.

Next Steps:

* From the graph we obtained, we are going to add an amendment to the graph that allows us to graph the times series more accurately, and from that graph we could find out the lyanupov exponent of the Chua’s circuit.
* We would also experimentally determine the lyanupov exponent from the circuit board that Professor Wolf gave us to experiment on.