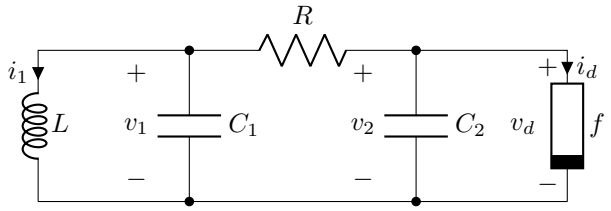
The simulation shown at the top of this page is the phase portrait of a chaotic circuit of the type first described by Chua in XXXX [X].



Consider the circuit shown above, where f is a diode with a I-V characteristic described by $i_d = f(v_d)$, where f may be non-linear. The circuit is described by the coupled ODEs

$$\begin{aligned}
\frac{\mathrm{d}v_1}{\mathrm{d}t} &= \frac{1}{RC_1}\left(-v_1 + v_2 - Ri_1\right), \\
\frac{\mathrm{d}v_2}{\mathrm{d}t} &= \frac{1}{RC_2}\left(v_1 - v_2 - Rf(v_2)\right), \\
\frac{\mathrm{d}i_1}{\mathrm{d}t} &= \frac{1}{L}v_1.
\end{aligned}$$