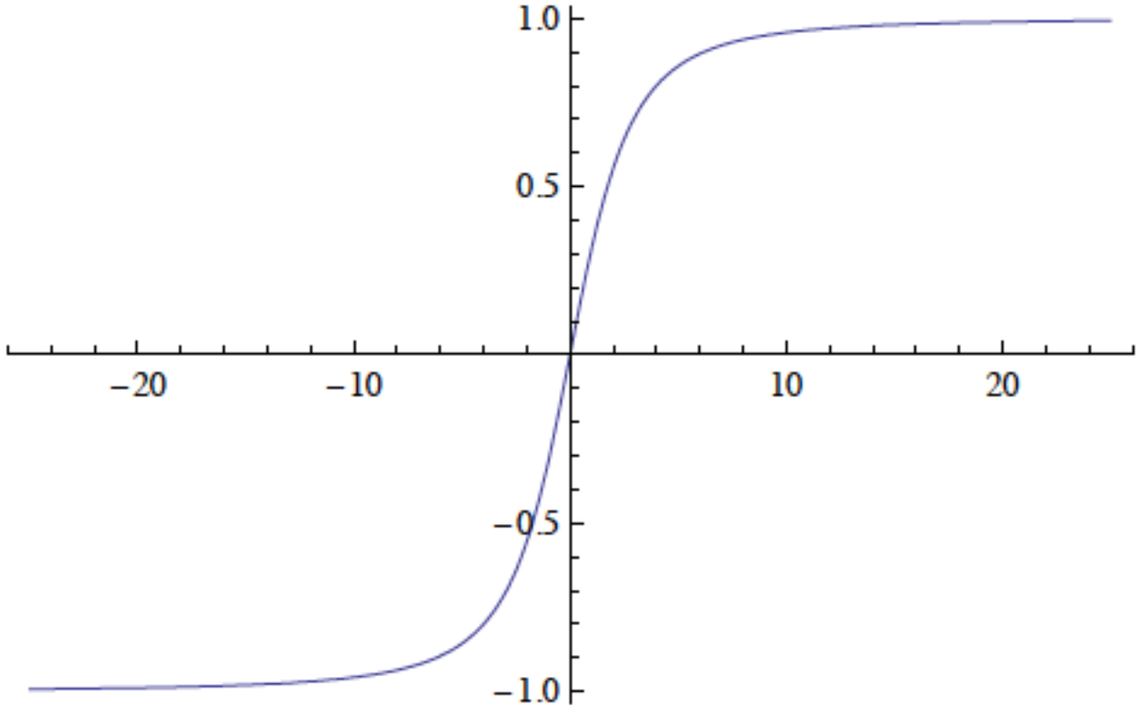
Lc



The plot to the left shows the behavior of the current as a function of time (or position, since position is proportional to time). The The plot is made with parameters:

$$\frac{2\pi s}{Lc} = 1 \quad v = 1 \quad R = 3$$

Notice how the most of the current is generated within a distance R of the loop.

An actual experimental candidate for monopole detection in this setup was found about 25 years ago. Please see Cabrera, Blas. *First Results from a Superconductive Detector for Moving Monopoles*, Phys. Rev. Lett. (48) 1378 (1982) for more information.