

Octave figures for L^AT_EX: basics

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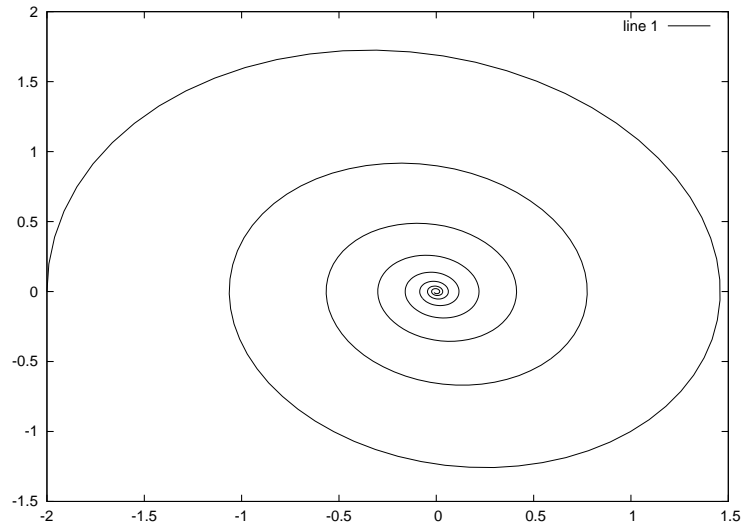
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1 Phase portrait of an oscillator

Consider a system that describes an oscillator with a viscous friction,

$$\frac{dx}{dt} = v, \quad \frac{dv}{dt} = -x - \frac{1}{5}v. \quad (1)$$

Here is a plot in the phase plane the numerical solution to (1) with the initial data $x(0) = -2$, $v(0) = 0$.



2 References

<http://www.math.tamu.edu/~comech/tools/octave-basics/>