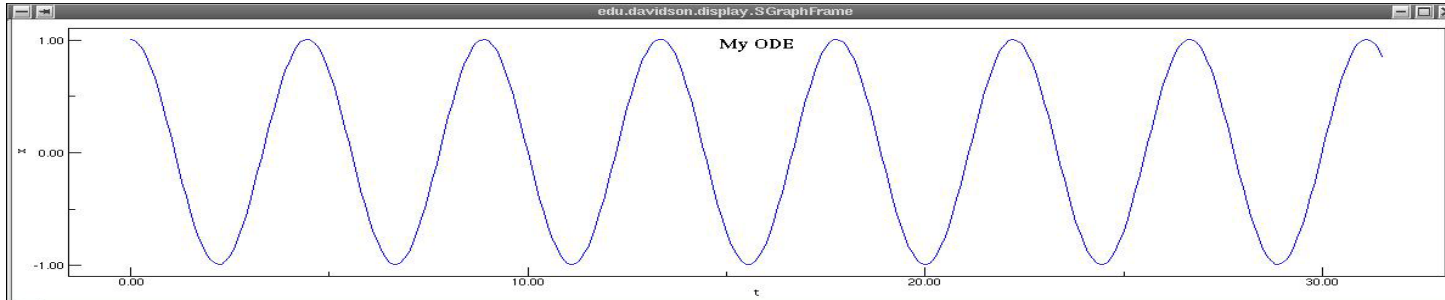
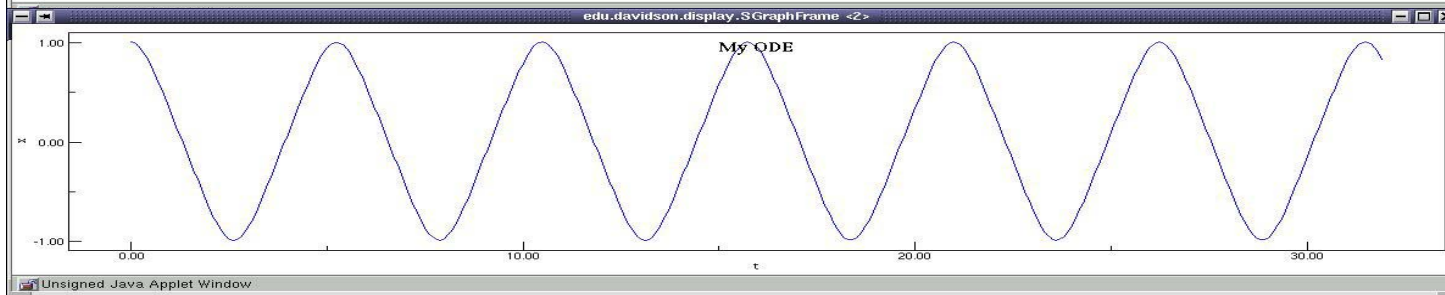


# Numerische Integration von Bewegungsgleichungen

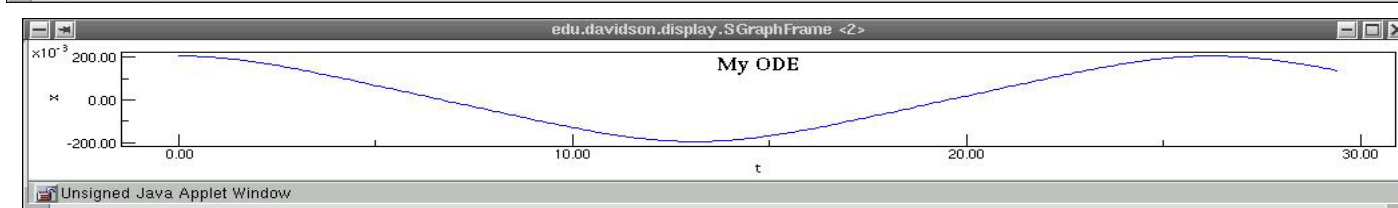
Schwingungen:  $ma = -2 * f(x)$      $x(0)=1; v(0)=0$



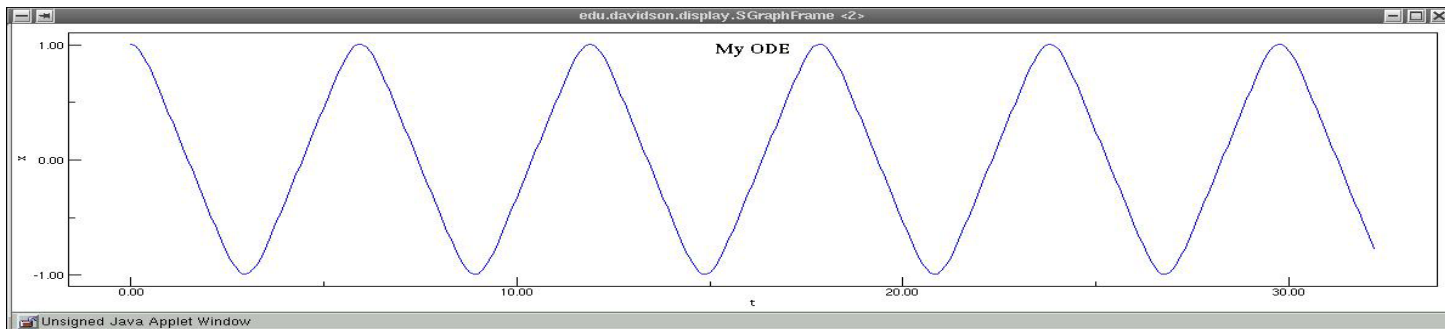
$$f(x) = -2 * x$$
$$x = \cos(\omega t)$$



$$f(x) = -2 * x^3$$
$$x(0) = 1$$



$$f(x) = -2 * x^3$$
$$x(0) = 0.2$$



$$f(x) = -2 * x^5$$