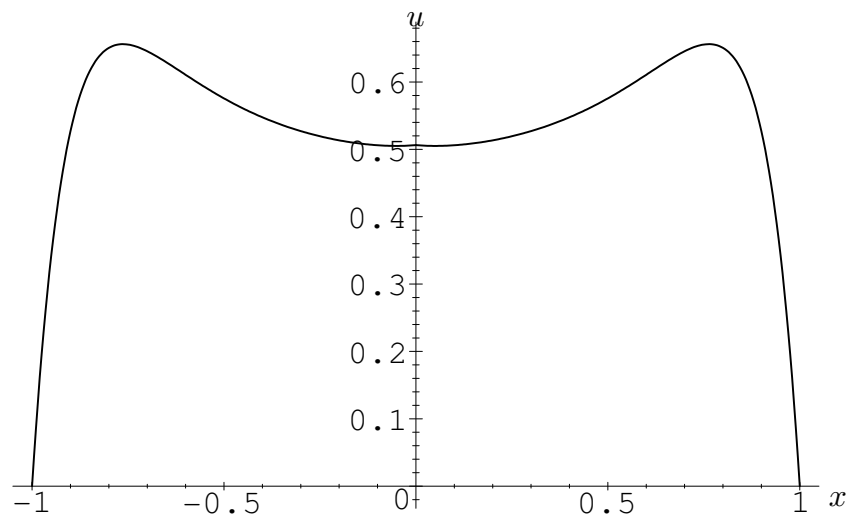


Scaling the Dependent Variable

Consider the following system:

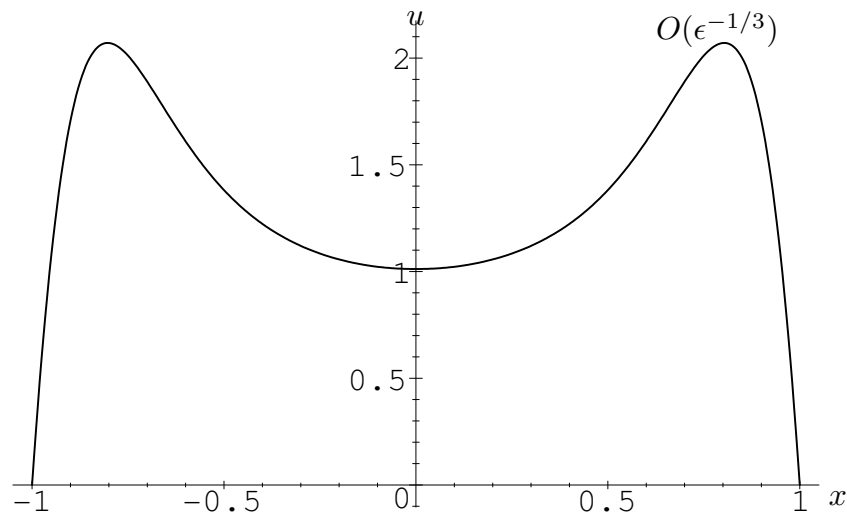
$$\epsilon u'' - (2 - x^2)u = -1, \quad u(-1) = u(1) = 0. \quad (1)$$



Computed solution with $\epsilon = 0.01$.
(The asymptotic solution can't be distinguished on the graph.)

Consider the following system:

$$\epsilon u'' - (1 - x^2)u = -1, \quad u(-1) = u(1) = 0. \quad (2)$$



Computed solution with $\epsilon = 0.005$.