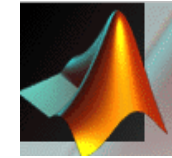


Bemerkung 1.9: Die 1D Wellengleichung

$$u_{tt} - c^2 u_{xx} = f(x, t)$$



see
[plotwave.m](#)

Homogene Wellengleichung

$$f \equiv 0$$

Allgemeine Lösung

$$u_h(x, t) = g(x - ct) + h(x + ct)$$

Beispiel

$$c = 2.5, \quad g(x) = h(x) = e^{-x^2/2}$$

