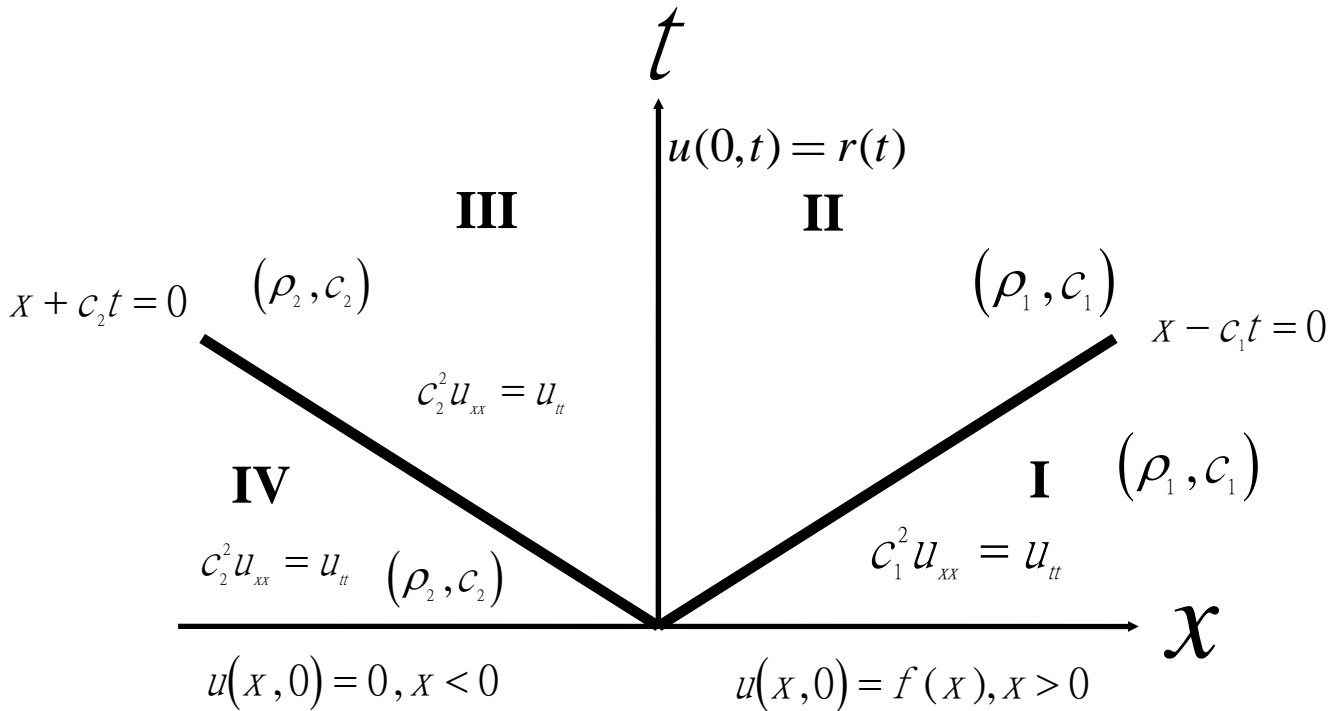


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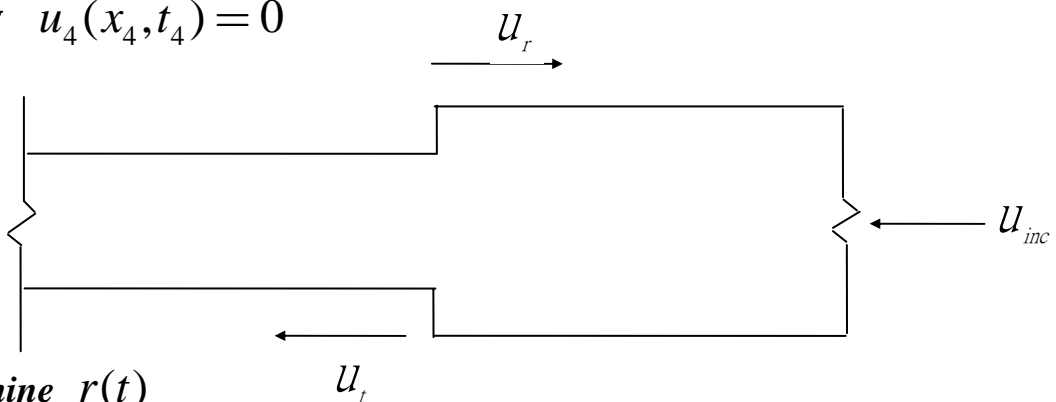


Region I $u(x_1, t_1) = \frac{1}{2}(f(x_1 + c_1 t_1) - f(x_1 - c_1 t_1))$

Region II $u(x_2, t_2) = \frac{1}{2}(f(x_2 + c_1 t_2) - f(-x_2 + c_1 t_2)) + r(t_2 - \frac{x_2}{c_1})$

Region III $u(x_3, t_3) = r(\frac{x_3 + c_2 t_3}{c_2})$

Region IV $u_4(x_4, t_4) = 0$



Determine $r(t)$