2. Linear Hyperbolic Equations

2.1. Wave Equation $\dfrac{\partial^2 w}{\partial t^2} = a^2 \dfrac{\partial^2 w}{\partial x^2}$

2.2. Nonhomogeneous Wave Equation $\dfrac{\partial^2 w}{\partial t^2} = a^2 \dfrac{\partial^2 w}{\partial x^2} + \Phi(x,t)$

2.3. Klein–Gordon Equation $\dfrac{\partial^2 w}{\partial t^2} = a^2 \dfrac{\partial^2 w}{\partial x^2} - bw$

2.4. Nonhomogeneous Klein–Gordon Equation $\dfrac{\partial^2 w}{\partial t^2} = a^2 \dfrac{\partial^2 w}{\partial x^2} - bw + \Phi(x,t)$

2.5. Wave Equation of the Form $\dfrac{\partial^2 w}{\partial t^2} = a^2 \left(\dfrac{\partial^2 w}{\partial r^2} + \dfrac{1}{r} \dfrac{\partial w}{\partial r} \right) + \Phi(r,t)$

2.6. Wave Equation of the Form $\dfrac{\partial^2 w}{\partial t^2} = a^2 \left(\dfrac{\partial^2 w}{\partial r^2} + \dfrac{2}{r} \dfrac{\partial w}{\partial r} \right) + \Phi(r,t)$

2.7. Telegraph Equation $\dfrac{\partial^2 w}{\partial t^2} + k \dfrac{\partial w}{\partial t} = a^2 \dfrac{\partial^2 w}{\partial x^2} + bw$