Elliptic HyperbolicParabolic $(wave\ equation)$ (Heat equation) (Laplace's equation) u or normal derivative given \mathcal{X} \mathcal{X} u(x,0) given u(x,0) and $u_{+}(x,0)$ given $u_{tt} - c^2 u_{rr} = 0$ $u_{xx} + u_{yy} = 0$ $u_{t} - k u_{xx} = 0$