Recap

- The time evolution of a *continuous field* $u(x)$ can be described by a partial differential equation (PDE).

- The diffusion equation $\frac{\partial u}{\partial t} = D\frac{\partial^2 u}{\partial x^2}$ and the wave equation $\frac{\partial^2 u}{\partial t^2} = v^2\frac{\partial^2 u}{\partial x^2}$ are two commonly encountered PDEs.

- The full description of a PDE on an interval requires specification of *boundary conditions* at edges of the interval.