

$$\frac{\partial u}{\partial x} + \frac{\partial v}{\partial y} = 0$$

$$u \frac{\partial u}{\partial x} + v \frac{\partial u}{\partial y} = \frac{\partial^2 u}{\partial y^2} + 6k \frac{\partial^2 u}{\partial y^2} \left( \frac{\partial u}{\partial y} \right)^2$$

$$u \frac{\partial T}{\partial x} + v \frac{\partial T}{\partial y} = \dots \frac{\partial^2 T}{\partial y^2}$$