Equations in Markdown are rendered by placing a valid LaTeX math expression between two dollar (\$) signs. For example, the divergence-free constraint of an incompressible flow can be stated as  $\nabla \cdot u = 0$ . We can also display longer equations in their own block using two leading and trailing dollar signs:

$$\frac{\partial u}{\partial t} + (u \cdot \nabla)u = -\frac{1}{\varrho}\nabla p + \nu \nabla^2 u$$