

In this example we consider the stationary incompressible Navier-Stokes equation. Here, we use the symmetric stress tensor which has a little consequence when using the do-nothing outflow condition. In strong formulation we have

$$\begin{aligned} -\nabla \cdot (\nabla v + \nabla v^T) + (v \cdot \nabla)v + \nabla p &= f \\ \operatorname{div} v &= 0 \end{aligned}$$

on the domain $\Omega = [-6, 6] \times [0, 2]$. We choose for simplicity $f = 0$.