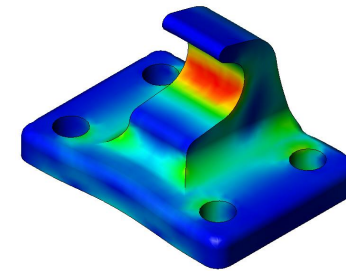


$$\begin{aligned}
 & \left. \begin{aligned}
 -\nabla \cdot \nabla u &= f \text{ in } \Omega \\
 u &= u_0 \text{ on } \Gamma_D \\
 \nabla \cdot \nabla u &= g \text{ on } \Gamma_N
 \end{aligned} \right\} \\
 & \partial \Omega = \Gamma_D \cup \Gamma_N, \quad \Gamma_D \cap \Gamma_N = \emptyset \\
 & \text{Find } u \in X(u_0) \text{ such that} \\
 & \int_{\Omega} \nabla u \cdot \nabla w \, d\Omega = \int_{\Omega} f w \, d\Omega + \int_{\Gamma_N} g w \, dS \\
 & \forall w \in X(0) \\
 & X(f) = \left\{ u \in H^1(\Omega), u = f \text{ on } \Gamma_D \right\}
 \end{aligned}$$

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