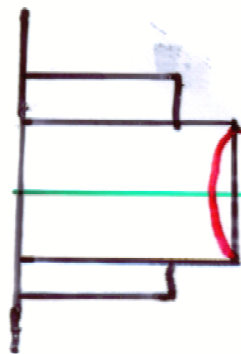


Optimal Design Problem:

$$\min_{d \in D_{ad}} \frac{1}{|\Omega_m| |B_{req}|} \int_{\Omega_m} |B(d) - B_{req}|^2 dx$$

s.t. .

$$B(d) = \begin{pmatrix} \partial_x u \\ -\partial_x u \\ 0 \end{pmatrix} : \begin{aligned} & -\operatorname{div}(v \nabla u) = f \text{ in } \Omega \\ & u = 0 \text{ auf } \Gamma_1 \\ & v \frac{\partial u}{\partial n} = 0 \text{ auf } \Gamma_2 \end{aligned}$$



d z.B. Spline; ...

$$d \in D_{ad} \stackrel{\text{z.B.}}{:=} \{ \mathbb{R}^4 : \underline{d}_i \leq d_i \leq \bar{d}_i, i=1,4 \}$$