PytHHOn3D documentation

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1 Introduction

The PytHHOn3D library is a

2 Formal setting

Let Ω a domain in $\mathbb{R}^d$ with Lipschitz boundaries. Let $H^1(\Omega;\mathbb{R}^d) = \left\{\boldsymbol{u} \in L^2(\Omega;\mathbb{R}^d), \nabla\boldsymbol{u} \in L^2(\Omega;\mathbb{R}^d)\right\}$ the usual functional space on Ω. Let $\mathcal{T}_h$ a mesh of Ω and $H^1(\mathcal{T}_h;\mathbb{R}^d) = \left\{\boldsymbol{u} \in L^2(\Omega;\mathbb{R}^d), \forall T \in \mathcal{T}_h, \boldsymbol{u}|_T \in H^1(T;\mathbb{R}^d)\right\}$ the usual functional space on $\mathcal{T}_h$

One dimensional problem

References