

Erratum

On the Multi-Level Splitting of Finite Element Spaces

Harry Yserentant

Fachbereich Mathematik der Universität Dortmund, Vogelpothsweg 87, D-4600 Dortmund 50,
Federal Republic of Germany

Numer. Math. 49, 379–412 (1986)

On page 398 two different norms are denoted in the same way making Theorem 4.1 to a tautology.

Formula (4.9) should read as follows:

$$\| \|u\| \|^2 = \|I_0 u\|^2 + |u|^2, \quad u \in \mathcal{S}_j \cap H(\Omega). \quad (4.9)$$

With this notation the correct version of Theorem 4.1 is:

Theorem 4.1. *There exist positive constants K_1 and K_2 , which are independent of the number j of refinement levels, with*

$$\frac{K_1}{(j+1)^2} \| \|u\| \|^2 \leq \|u\|^2 \leq K_2 \| \|u\| \|^2$$

for all functions $u \in \mathcal{S}_j \cap H(\Omega)$. K_1 depends only on the constants M and δ in (4.2) and (4.3) respectively, on a lower bound for the interior angles of the triangles in the final triangulation and possibly on the diameter of the domain Ω . For a nonuniformly refined family of nested triangulations as described in Sect. 3 K_2 depends in addition on the constants α and q from (3.12).