Erratum

On the Multi-Level Splitting of Finite Element Spaces

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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:

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

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*

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

*for all functions $u \in \mathscr{S}_j \cap H(\Omega)$. 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).*