



# Correction to: General theory of interpolation error estimates on anisotropic meshes

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## Correction to:

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This article is a correction to our previous paper [1]. The geometric parameters  $\alpha_{\max}$  and  $\alpha_{\min}$ , which represent the maximum and minimum edge lengths of the simplex under consideration, play a significant role in [1]. Theorems 2 and 3 claim that the interpolation errors can be estimated without the ratio  $\alpha_{\max}/\alpha_{\min}$ . Unfortunately, the proofs of Theorems 2 and 3 contain some mistakes. The ratio  $\alpha_{\max}/\alpha_{\min}$  cannot be removed from by the technique proposed in [1].

As a correction to Theorem 2, Theorems A and B are given in [3]. Theorem A presents an error estimate with the ratio  $\alpha_{\max}/\alpha_{\min}$  under the assumptions of Theorem 2 in [1]. Theorem B presents an error estimate without the ratio  $\alpha_{\max}/\alpha_{\min}$  under stronger assumptions than in Theorem 2.

Using a new approach, we have succeeded in completing the proof of Theorem 3 in [1]. See Theorems 2 and 3 in [2] for the detail.

## References

1. Ishizaka, H., Kobayashi, K., Tsuchiya, T.: General theory of interpolation error estimates on anisotropic meshes. *Jpn. J. Ind. Appl. Math.* **38**(1), 163–191 (2021)

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2. Ishizaka, H.: Anisotropic Raviart–Thomas interpolation error estimates using a new geometric parameter. *Calcolo* **59**(4), 50 (2022)
3. Ishizaka, H., Kobayashi, K., Tsuchiya, T.: Anisotropic interpolation error estimates using a new geometric parameter. *Jpn. J. Ind. Appl. Math.* **40**(1), 475–512 (2022)

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