Post-publication comment concerning "Condition number bounds for IETI-DP methods that are explicit in h and p"

Rainer Schneckenleitner

Institute of Computational Mathematics, Johannes Kepler University Linz, Altenberger Str. 69, 4040 Linz, Austria schneckenleitner@numa.uni-linz.ac.at

Stefan Takacs

Johann Radon Institute Institute for Computational and Applied Mathematics (RICAM),
Austrian Academy of Sciences,
Altenberger Str. 69, 4040 Linz, Austria
stefan.takacs@ricam.oeaw.ac.at

There are a few typos at the in the proof of Lemma 4.14 (changes are marked in red):

- On page 2089, it should read: "Consider the case that $C_{\epsilon}(x) \subset \overline{Q^*}$, where $\epsilon = 4^{-1}p^{-4}\widehat{h}^2$, first."
- Equation (4.16) should read:

$$\int_{0}^{\epsilon} \frac{\partial v}{\partial \rho}(\rho, \theta) d\rho \leq \epsilon \left\| \frac{\partial v}{\partial \rho} \right\|_{L_{\infty}((0, \epsilon) \times (0, \pi/2))} \leq \epsilon |\widehat{u}|_{W_{\infty}^{1}(Q^{*})} \lesssim \underbrace{p^{4} \widehat{h}^{-2} \epsilon}_{\overline{\sim} 1} \|\widehat{u}\|_{L_{2}(Q^{*})}.$$

• On page 2090, it should read: "Moreover, we observe that $\|x - \tilde{x}\|_{\ell^2}^2 \lesssim p^{-4} \hat{h}^2$. Thus, we conclude using the fundamental theorem of calculus

$$(\widehat{u}(x) - \widehat{u}(\widetilde{x}))^2 \le \|x - \widetilde{x}\|_{\ell^2}^2 \|\widehat{u}\|_{W_{\infty}^{1}(Q^*)}^2 \lesssim p^{-8} \widehat{h}^4 \|\widehat{u}\|_{W_{\infty}^{1}(Q^*)}^2.$$