Corrigendum to the paper "The universal Banach space with a K-suppression unconditional basis"

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Abstract. We observe that the notion of an almost $\mathfrak{F}\mathfrak{I}_K$-universal based Banach space, introduced in our earlier paper [1]: Banakh T., Garbulińska–Węgrzyn J., *The universal Banach space with a K-suppression unconditional basis*, Comment. Math. Univ. Carolin. **59** (2018), no. 2, 195–206, is vacuous for $K = 1$.

Taking into account this discovery, we reformulate Theorem 5.2 from [1] in order to guarantee that the main results of [1] remain valid.

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Classification: 46B04, 46M15, 46M40

In the paper [1] for every real number $K \geq 1$ we have introduced the notion of an almost $\mathfrak{F}\mathfrak{I}_K$-universal based Banach space and proved some properties of such spaces. But in the paper [2] we discovered that for $K > 1$ the notion of an almost $\mathfrak{F}\mathfrak{I}_K$-universal Banach space is vacuous, as shown by the following proposition that can be proved by analogy with Proposition 5.8 in [2].

Proposition. *No based Banach space is almost $\mathfrak{F}\mathfrak{I}_K$-universal for $K > 1$.*

This Proposition implies that Theorem 5.2 of the paper [1] does not hold for $K > 1$, so should be rewritten in the following redaction (which can be proved by analogy with Theorem 5.9 in [2]).

Theorem 5.2′. *Any $\mathfrak{R}\mathfrak{I}_K$-universal rational K-based Banach space is almost $\mathfrak{F}\mathfrak{I}_1$-universal.*

Fortunately, this restricted version of Theorem 5.2 is still sufficient for deriving Corollary 5.8 (on the $\mathfrak{B}$ isomorphness of the $\mathfrak{R}\mathfrak{I}_K$-universal K-based Banach spaces $\mathbb{U}_K$ to the $\mathfrak{B}$-universal Pełczyński space $\mathbb{U}$). All other results proved in [1] remain valid (since their proofs do not use Theorem 5.2).

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References

[1] Banakh T., Garbulińska–Węgrzyn J., *The universal Banach space with a K-suppression unconditional basis*, Comment. Math. Univ. Carolin. **59** (2018), no. 2, 195–206.

[2] Banakh T., Garbulińska–Węgrzyn J., *A universal Banach space with a K-unconditional basis*, Adv. Oper. Theory **4** (2019), no. 3, 574–586.

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