

Taras O. Banakh; Joanna Garbulińska-Wegrzyn

Corrigendum to the paper “The universal Banach space with a  $K$ -suppression unconditional basis”

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**Corrigendum to the paper**  
**“The universal Banach space with**  
**a  $K$ -suppression unconditional basis”**

TARAS BANAKH, JOANNA GARBULIŃSKA-WĘGRZYN

*Abstract.* We observe that the notion of an almost  $\mathfrak{J}_K$ -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.

*Keywords:* 1-suppression unconditional Schauder basis; rational spaces; isometry

*Classification:* 46B04, 46M15, 46M40

In the paper [1] for every real number  $K \geq 1$  we have introduced the notion of an almost  $\mathfrak{J}_K$ -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  $\mathfrak{J}_K$ -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  $\mathfrak{J}_K$ -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  $\mathfrak{R}_K$ -universal rational  $K$ -based Banach space is almost  $\mathfrak{J}_1$ -universal.*

Fortunately, this restricted version of Theorem 5.2 is still sufficient for deriving Corollary 5.8 (on the  $\mathfrak{B}$  isomorphness of the  $\mathfrak{R}_K$ -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).

## REFERENCES

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

T. Banach, J. Garbulińska-Węgrzyn:

INSTITUTE OF MATHEMATICS, JAN KOCHANOWSKI UNIVERSITY IN KIELCE,  
STEFANA ŻEROMSKIEGO 5, 25-001 KIELCE, POLAND

*E-mail:* t.o.banach@gmail.com

*E-mail:* jgarbulinska@ujk.edu.pl

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