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**On Banach spaces universal for separable metric spaces via Lipschitz embeddings with distortion less than 2**

Antonín PROCHÁZKA (Université Franche-Comté — France)

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We say that a Banach space  $X$  is  *$D$ -Lipschitz universal* if every separable metric space embeds bi-Lipschitz into  $X$  with distortion at most  $D$ . A non-trivial example of a  $D$ -Lipschitz universal Banach space is  $c_0$ . This is due to Aharoni who also established in this case that  $D$  cannot be less than 2. Kalton and Lancien later proved that  $D = 2$  works. We will show that if  $D < 2$  and  $X$  is  $D$ -Lipschitz universal, then  $X$  is not Asplund. If we assume moreover that  $X$  is a  $C(K)$  space, then  $X$  is universal.

**Joint work with Luis Sánchez González.**