ON EQUIVALENCE RELATIONS GENERATED BY SCHAUDER BASES

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ABSTRACT. Let (x_n) be a sequence in a Banach space X. We denote

$$\text{coef}(X, (x_n)) = \{a \in \mathbb{R}^{\mathbb{N}} : \sum_n a(n)x_n \text{ converges}\}.$$

In this talk, we focus on Borel reducibility between equivalence relations of $\mathbb{R}^{\mathbb{N}}/\text{coef}(X, (x_n))$. This kind of research begin from Dougherty and Hjorth's results on $\mathbb{R}^{\mathbb{N}}/\ell_p$ $(p \geq 1)$ and $\mathbb{R}^{\mathbb{N}}/c_0$.

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