The Set of Exponents for Isomorphic Extensions of Hölder Maps is not Always Closed

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Abstract: We give examples of Banach spaces $X$ and $Y$ such that the sets of $\alpha \in (0, 1]$, which satisfy that every $\alpha$-Hölder maps from a subset of $X$ into $Y$ can be isomorphically extended to all $X$, are not closed. This answers a question of Lancien and Randrianantoanina.

Key words: Extension, Hölder map.

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REFERENCES