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**Correction to "On the non-measurability of a certain mapping"**

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# CORRECTION TO 'ON THE NON-MEASURABILITY OF A CERTAIN MAPPING'

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Professor Walter Rudin has pointed out to me that $C(\beta R)$ is not separable, and hence that all conclusions in [1] which are based on this assumption are not proved. Thus, we cannot assert the non-Baire-measurability of either of the maps $\pi : R \times \beta R \to \beta R$ or $\pi : R \times K \to K$ (where $K$ is the support of an invariant mean of the type referred to in the paper). To my knowledge, both questions remain open. (A similar question is asked on page 226 of [2].)

The construction in [1] of the function $f$ is unaffected by the above. Hence we can still assert that the map $p \to T^p f$ from $R$ to $L^1(m)$ is discontinuous for a large class of invariant means. From this it is easy to prove that the map $\pi : R \times K \to K$ is discontinuous.

## REFERENCES

[1] R. ATALLA: On the non-measurability of a certain mapping, *Comp. Math.*, 22 (1970), 137–141.
[2] W. RUDIN: Invariant means on $L^\infty$, *Studia Math. XLIV* (1972), 219–227.

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