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Tightness of compact spaces is preserved by the t -equivalence relation

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Abstract: We prove that if there is an open mapping from a subspace of $C_p(X)$ onto $C_p(Y)$, then Y is a countable union of images of closed subspaces of finite powers of X under finite-valued upper semicontinuous mappings. This allows, in particular, to prove that if X and Y are t -equivalent compact spaces, then X and Y have the same tightness, and that, assuming $2^t > \mathfrak{c}$, if X and Y are t -equivalent compact spaces and X is sequential, then Y is sequential.

Keywords: function spaces, topology of pointwise convergence, tightness

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