

Distances between $C(K)$ spaces

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It has been known for some time that distances between Banach spaces of continuous functions on compact Hausdorff spaces have some very unexpected behavior. For example, the classical result of Amir and Cambern states that there are no compact spaces K, L such that the Banach-Mazur distance between $C(K)$ and $C(L)$ is strictly between 1 and 2. This has been quite recently generalized in some sense for nonlinear distances. Further, an old conjecture of Pełczyński, which states that the Banach-Mazur distance between two isomorphic $C(K)$ spaces is always an integer, still remains open. In the talk, we survey the known results about various types of distances between $C(K)$ spaces.