Richard Becker: Abstract.

Some classes of operators on separable Banach spaces.

We deal with the following natural question: Given two Banach spaces B and E, is it possible to describe all the operators from B to E that can be extended to every separable Banach space containing B.

We mainly consider the case when B is contained in the Banach space $\mathcal{C}([0,1])$. Namely, we consider two cases:

a) The class of operators $T : B \to E$ such that, for every embedding of B in $\mathcal{C}([0,1])$, there is an extension of T from $\mathcal{C}([0,1])$ to E.

b) The class of operators $T : B \to E$ such that, for some embedding of B in $\mathcal{C}([0,1])$, there is an extension of T from $\mathcal{C}([0,1])$ to E.