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Edward Beckenstein* (beckense@stjohns.edu), St. John's University, Dep. of Math & CS, 300 Howard Ave., DaSilva Hall, Staten Island, NY 10301, and **Lawrence Narici** (naricil@stjohns.edu), St. John's University, Dep. of Math & CS, 8000 Utopia Parkway, St. John's Hall 334, Queens, NY 11439. *Basis separating maps.*

Let X and Y be Banach spaces, each with a Schauder basis. A basis separating (disjointness preserving) operator A : from X into Y , is a map with the property that if sequences $(x(n))$ and $(y(n))$ in X satisfy $x(n)y(n)=0$ for all n , then $A((x(n)))A(y(n))=0$ for all n as well. In previous work with L. Narici we showed that a basis separating bijection is a homeomorphism as well as a weighted composition map $[A((x(n)))=(w(n)x(n))]$. We continue our work with these operators and have determined the nature of the sequences that can be used as weight coefficients $w(n)$ when X and Y are Lorentz sequence spaces, l -sub- p sequence spaces, Orlicz sequence spaces, and in all three cases the basis of Y is stronger than the basis of X . We have also determined the form of basis separating isometries A : from X into X , of Lorentz sequence spaces X as well as a necessary and sufficient condition for them to be onto). (Received February 20, 2006)