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Many of the known complemented subspaces of L_p have realizations as sequence spaces. Different norms on spaces will give different norms of projections. Hence it will influence our understanding of the complemented subspaces of L_p . By introducing a norm given by partitions and weights, Alspach and Tong proved a unification of well-known spaces. They proved that this new norm is stable for sums of spaces. The most recent result is that subspaces of L_p , $p > 2$, with unconditional bases have equivalent partition and weight norms.

This presentation will introduce the definition of the norm given by partitions and weights. A couple of examples will help us to understand the creation of a norm given by partitions and weights for a vector space. We will show that the space with this new norm is isomorphic to some well-known vector space. Finally we will present some discussion of creating a norm given by partitions and weights for a tensor product of Banach spaces.

This talk should be suitable for students who have had linear algebra and a first course of introduction to real analysis. We will review concepts of norms, Banach spaces and isomorphisms of spaces, and show some examples to help understand issues of projections and structures of spaces. (Received July 28, 2006)