

1014-46-1150

William B. Johnson and **N. Lovasoa Randrianarivony*** (lova@math.missouri.edu). *Coarse embeddings into a Hilbert space.*

A coarse embedding of a metric space X into a metric space Y is a map which controls the distances between points uniformly on a large scale. Such maps need not be continuous. In the study of coarse embeddings of a quasi-Banach space into a Hilbert space, we present the use of extensions to show that we can restrict our attention to coarse embeddings which are also uniformly continuous. This enables us to show that ℓ_p does not coarsely embed into a Hilbert space when $p > 2$, and furthermore it enables us to characterize the quasi-Banach spaces that coarsely embed into a Hilbert space. (Received September 27, 2005)