EMBEDDING METRIC SPACES INTO c_0.

ROBERT DEVILLE
UNIVERSITÉ DE BORDEAUX, FRANCE.

ABSTRACT. Let (M, d) be a separable metric space and $\lambda > 1$. We say that M strongly λ-embeds into c_0 (endowed with its usual supremum norm) if there exists $f = (f_n) : M \to c_0$ Lipschitz continuous, such that whenever $x, y \in M$ and $x \neq y$, then $d(x, y) < \|f(x) - f(y)\|$ and for each n, the Lipschitz constant of f_n is less than λ. We characterize separable metric spaces that strongly λ-embed into c_0 by an internal property called $\pi(\lambda)$. All separable metric spaces strongly 2-embed into c_0. This is a joint work with Florent Baudier and simplifies former work obtained by Nigel Kalton and Gilles Lancien.