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Functions with no critical points on separable Banach spaces

The Morse–Sard theorem states that if $f\colon R^n \longrightarrow R^m$ is a C^r smooth function, with $r > \max\{n-m, 0\}$, and C_f stands for the set of critical points of f (that is, the points of X at which the differential of f is not surjective), then the set of critical values, $f(C_f)$, is of (Lebesgue) measure zero in R^m. This result is no longer true for functions defined on infinite dimensional Banach spaces. However, under this setting it is possible to develop a *strong approximate* version of such classical principle.