



Math for the people, by the people.

equibounded

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Let  $X$  and  $Y$  be metric spaces. A family  $F$  of functions from  $X$  to  $Y$  is said to be *equibounded* if there exists a bounded subset  $B$  of  $Y$  such that for all  $f \in F$  and all  $x \in X$  it holds  $f(x) \in B$ .

Notice that if  $F \subset \mathcal{C}_b(X, Y)$  (continuous bounded functions) then  $F$  is equibounded if and only if  $F$  is bounded (with respect to the metric of uniform convergence).