



Math for the people, by the people.

continuous convergence

Canonical name	ContinuousConvergence
Date of creation	2013-03-22 14:04:58
Last modified on	2013-03-22 14:04:58
Owner	Mathprof (13753)
Last modified by	Mathprof (13753)
Numerical id	7
Author	Mathprof (13753)
Entry type	Definition
Classification	msc 54A20
Synonym	converges continuously

Let (X, d) and (Y, ρ) be metric spaces, and let $f_n : X \longrightarrow Y$ be a sequence of functions. We say that f_n *converges continuously* to f at x if $f_n(x_n) \longrightarrow f(x)$ for every sequence $(x_n)_n \subset X$ such that $x_n \longrightarrow x \in X$. We say that f_n *converges continuously* to f if it does for every $x \in X$.