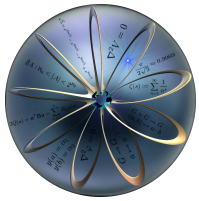

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weak convergence

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Suppose X is a topological vector space, X' is the continuous dual of X, and $x_0, x_1, \ldots$ is a sequence in X. Then we say that x_i *converges weakly* to $x \in X$ if

$$\lim_{i \to \infty} f(x_i) = f(x)$$

for every $f \in X'$. The notation for this is $x_i \xrightarrow{w} x$.