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so many fake sites. this is the first one which worked! Many thanks

Suppose $1 \leq p < \infty$. If $\int |f_n - f|^p d\mu \rightarrow 0$, then $f_n \rightarrow f$ in measure, and hence some subsequence converges to f a.e. On the other hand, if $f_n \rightarrow f$ in measure and $\{f_n\} \leq g \in L^p$ for all n , then $\int |f_n - f|^p d\mu \rightarrow 0$.

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Proof: Define the set $E_{n,\epsilon} := \{x : |f_n(x) - f(x)|^p \geq \epsilon^p\}$. Then

$$\int |f_n - f|^p d\mu \geq \int_{E_{n,\epsilon}} |f_n - f|^p d\mu \geq \int_{E_{n,\epsilon}} \epsilon^p d\mu = \epsilon^p \mu(E_{n,\epsilon}),$$

and thus as $n \rightarrow \infty$, we have that

$$\mu(E_{n,\epsilon}) \leq \frac{1}{\epsilon^p} \int |f_n - f|^p d\mu \rightarrow 0.$$

Hence, $\mu(E_{n,\epsilon}) \rightarrow 0$. Thus, $f_n \rightarrow f$ in measure.