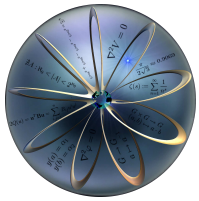

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Egorov's theorem

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Let $(X, \mathcal{S}, \mu)$ be a measure space, and let E be a subset of X of finite measure. If f_n is a sequence of measurable functions converging to f almost everywhere, then for each $\delta > 0$ there exists a set E_δ such that $\mu(E_\delta) < \delta$ and $f_n \to f$ `http://planetmath.org/UniformConvergence`uniformly on $E - E_\delta$.