



Math for the people, by the people.

regular measure

Canonical name	RegularMeasure
Date of creation	2013-03-22 18:23:07
Last modified on	2013-03-22 18:23:07
Owner	bci1 (20947)
Last modified by	bci1 (20947)
Numerical id	5
Author	bci1 (20947)
Entry type	Definition
Classification	msc 28C15
Classification	msc 28A12
Classification	msc 28A10
Related topic	OuterMeasure

Definition 0.1. A regular measure μ_R on a topological space X is a measure on X such that for each $A \in \mathcal{B}(X)$, with $\mu_R(A) < \infty$, and each $\varepsilon > 0$ there exist a compact subset K of X and an open subset G of X with $K \subset A \subset G$, such that for all sets $A' \in \mathcal{B}(X)$ with $A' \subset G - K$, one has $\mu_R(A') < \varepsilon$.