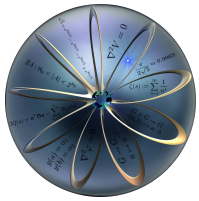

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sample function

Canonical name	SampleFunction
Date of creation	2013-03-22 15:21:15
Last modified on	2013-03-22 15:21:15
Owner	gel (22282)
Last modified by	gel (22282)
Numerical id	5
Author	gel (22282)
Entry type	Definition
Classification	msc 60G17
Classification	msc 60G05
Defines	sample path

Let $\{X(t) \mid t \in T\}$ be a stochastic process, where $X(t)$ is a random variable on the probability space $(\Omega, \mathcal{F}, \mathbf{P})$. Writing $X(t)$ as $X(t, \omega)$, where $t \in T$ and $\omega \in \Omega$, we see that if we fix the sample point ω, we have a function in t: $X_\omega(t) \colon t \mapsto X(t)$. This function $X_\omega(t)$ of t is called a *sample function*, or *sample path* of the stochastic process.