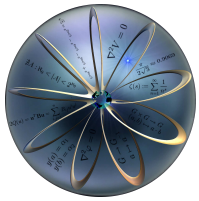

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stationary increment

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Entry type	Definition
Classification	msc 60G51
Defines	stationary independent increment

A stochastic process $\{X(t) \mid t \in T\}$ of real-valued random variables $X(t)$, where T is a subset of $\mathbb{R}$, is said have *stationary increments* if the probability distribution function for $X(s+t) - X(s)$ is fixed (the same) for all $s \in T$ such that $s + t \in T$. In other words, the distribution for $X(s+t) - X(s)$ is a function of "how long" or t, not "when" or s.

A stochastic process that possesses both stationary increments and independent increments is said to have *stationary independent increments*.