



MathsNET

A joined up approach to
teaching and learning
mathematics

The Inhomogeneous Poisson Process

- Explain how the inhomogeneous Poisson process differs from the poisson process (the homogeneous one) that we introduced in previous videos.
- Give an expression for the probability $P(N(t) = 0)$ if $N(t)$ is given by an inhomogeneous Poisson process with rate function $\lambda(t)$.
- State the fundamental theorem of calculus.
- Give an expression for the probability $P(N(t) = 1)$ if $N(t)$ is given by an inhomogeneous Poisson process with rate function $\lambda(t)$.



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- Try to derive an expression for $P(N(t) = 2)$ if $N(t)$ is given by an inhomogeneous Poisson process with rate function $\lambda(t)$.