

The diagram illustrates the relationship between the probability mass function and the likelihood function for a Poisson distribution. The equation $P(X = \kappa | \lambda) = e^{-\lambda} \frac{\lambda^{\kappa}}{\kappa!}$ is shown, with κ in purple and λ in green. A purple arrow points from the κ in the denominator of the fraction to the text "Function of κ : distribution". A green arrow points from the λ in the exponent to the text "Function of λ : likelihood".

$$P(X = \kappa | \lambda) = e^{-\lambda} \frac{\lambda^{\kappa}}{\kappa!}$$

Function of κ : distribution

Function of λ : likelihood