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*A note on the modes of the Poisson distribution of order  $k$ ,*  
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**Abstract**

It is shown that the Poisson distribution of order  $k$  ( $\geq 1$ ) with parameter  $\lambda$  ( $> 0$ ) has a unique mode  $m_{k,\lambda} = 0$  if  $0 < \lambda < 2/(k(k+1))$ . In addition,  $m_{2,\lambda} = 0$  if  $0 < \lambda \leq -1 + \sqrt{3}$  and  $m_{2,\lambda} = 2$  if  $-1 + \sqrt{3} \leq \lambda < 1$ .