

ON A RELATION BETWEEN q -EXPONENTIAL AND
 θ -FUNCTION

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ABSTRACT. We will use a discrete analogue of the classical Laplace method to show that for infinitely many positive integers n , the main term of the asymptotic expansion of the scaled q -exponential $(-q^{-nt+1/2}u; q)_\infty$ could be expressed in θ -function.

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