

1020-42-277

George C. Stey*, Mathematics Building, 121A, The Ohio State University, 231 West 18th Ave., Columbus, OH 43210. *Behavior of the Sum of the Absolute Values of the Bessel Functions.*

It is shown that

$$\lim_{0 < |x| \rightarrow \infty} \sum_{k=-\infty}^{\infty} |J_k(x)| / \sqrt{(|x|)} = 16 / (\Gamma(1/4))^2,$$

where J_k is the k -th order Bessel function of the first kind and Γ is the gamma function. (Received August 31, 2006)