



**SIMPLE RATIONAL BOUNDS FOR  
THE GAMMA FUNCTION**

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Received July 12, 2018

**Abstract**

In this paper, we present simple rational bounds for the gamma function on  $[0, 1]$ . This improves several known inequalities. Some elementary inequalities of real variables are proved.

**Keywords and phrases:** gamma function, inequality, Jensen inequality, monotonicity, psi function.

**Pioneer Journal  
of Mathematics  
and Mathematical  
Sciences**



**Pioneer Scientific  
Publisher**