Title: A refinement of a double inequality for the gamma function

Author(s): Jiao-Lian Zhao, Bai-Ni Guo and Feng Qi

In the paper, we present a monotonicity result of a function involving the gamma and logarithmic functions, refine a double inequality for the gamma function, improve some known results for bounding the gamma function, and pose an open problem and three conjectures.

Address:
Jiao-Lian Zhao
Department of Mathematics and Informatics
Weinan Teachers University
Weinan City, Shaanxi Province, 714000
China

Address:
Bai-Ni Guo
School of Mathematics and Informatics
Henan Polytechnic University
Jiaozuo City, Henan Province, 454010
China

Address:
Feng Qi
School of Mathematics and Informatics
Henan Polytechnic University
Jiaozuo City, Henan Province, 454010
China

and
Department of Mathematics
College of Science
Tianjin Polytechnic University
Tianjin City, 300160
China