Prof. Dr. Pedro Rafael D. Marinho

Department of Statistics, Federal University of Paraíba, João Pessoa, Paraíba - PB, Brazil pedro.rafael.marinho@gmail.com https://prdm0.rbind.io/

Prof. Dr. Pedro Rafael D. Marinho · Department of Statistics · Federal University of Paraíba · João Pessoa, Paraíba - PB, Brazil

Editor-in-Chief: Enrico Colosimo Brazilian Journal of Probability and Statistics - BJPS

Your letter of pedro.rafael.marinho@gmail.com

Date December 15, 2020

A new family of distributions: properties and applications

Dear **BJPS** Editor,

we would like to present the paper entitled **A new family of distributions: properties and applications** to the BJPS. This article introduces a new family by combining the Marshall and Olkin-G and Gamma-G classes. The family has only two extra shape parameters and can be a better model than other existing classes of distributions. Simulations are performed to verify the consistency of the estimators. Its flexibility is shown using two real data sets.

This article submitted to this journal is co-authored by researchers Gauss M. Cordeiro (PhD in Statistics from Imperial College, 1982) of the Statistics Department of Federal University of Pernambuco and Dra. Maria do Carmo S. Lima Federal of the Statistics Department of Federal University of Pernambuco.

This material has not been submitted to any other Journal.

Kind regards,

Prof. Dr. Pedro Rafael D. Marinho (DSc in Statistics from Federal University of Pernambuco)