

J. of Ramanujan Society of Mathematics and Mathematical Sciences
Vol. 11, No. 1 (2023), pp. 17-42

DOI: 10.56827/JRSMMS.2023.1101.2

ISSN (Online): 2582-5461

ISSN (Print): 2319-1023

**ON SOME EXTENDED SPECIAL FUNCTIONS WITH THE
BI-FOX-WRIGHT FUNCTION KERNEL**

**M. L. Kaurangini, M. P. Chaudhary*, U. M. Abubakar,
I. O. Kiymaz** and E. Ata****

Aliko Dangote University of Science and Technology,
Wudil P.M.B.: 3244 Kano, Kano State, NIGERIA

E-mail : kaurangini@kustwudil.edu.ng, uabubakar@kustwudil.edu.ng

*International Scientific Research and Welfare Organization
(Albert Einstein Chair Professor of Mathematical Sciences)
New Delhi 110018, INDIA

E-mail : dr.m.p.chaudhary@gmail.com

**Department of Mathematics,
Faculty of Arts and Science,
Kirsehir Ahi Evran University, Kirsehir, TURKEY

E-mail : iokiymaz@ahievran.edu.tr, enesata.tr@gmail.com

(Received: Aug. 07, 2023 Accepted: Dec. 02, 2023 Published: Dec. 30, 2023)

Abstract: In the present article, our main goal is to study the new extended beta, Gauss and confluent hypergeometric functions defined by using the two Fox-Wright functions as their kernel. Some applications of the new extended beta function to distribution theory are also discussed.

Keywords and Phrases: Gamma function, Beta function, Fox-Wright function, Mellin transform.

2020 Mathematics Subject Classification: 33B15, 33B20, 33C05, 11S80.