

Publicationes Mathematicae Debrecen **Year: 2023** **Vol.: 102** **Fasc.: 3-4**

Title: On the majorants of general Fourier coefficients and best approximations

Author(s): Vakhtang Tsagareishvili

Throughout this paper, we define the majorants for general Fourier coefficients of functions of bounded variation and also the majorants for the best approximations by means of the space L_2 of functions of bounded variation. It is proved that in different cases the majorants are different sequences. In this paper, we also study the majorants with respect to the classical orthonormal systems (trigonometric, Haar and Walsh systems). In addition, the behavior of subsequences of general orthonormal systems is given.

Address:

Vakhtang Tsagareishvili
Faculty of Exact and
Natural Sciences
I. Javakhishvili
Tbilisi State University
Tbilisi
Georgia