

# **SOME SPECTRAL PROPERTIES OF A NEW GENERALIZED DIFFERENCE OPERATOR**

**Authors:** *A. M. Ahmadov and S. R. El-Shabrawy*

## **Abstract**

The main purpose of this paper is to determine the spectrum of a new generalized difference operator, denoted by  $\Delta_{a, b, \lambda}$ , over the sequence space  $c_0$ . The norm of the operator  $\Delta_{a, b, \lambda}$  on the sequence space  $c_0$  has been found. The results of this paper generalize the corresponding results of [3], [4] and [7].