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## PROPERTIES OF THE SLANT WEIGHTED TOEPLITZ OPERATOR

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ABSTRACT. If  $\beta = \langle \beta_n \rangle_{n \in \mathbb{Z}}$  is a sequence of positive numbers, then a slant weighted Toeplitz operator  $A_\phi$  is an operator on  $L^2(\beta)$  defined as  $A_\phi = WM_\phi$  where  $M_\phi$  is the multiplication operator on  $L^2(\beta)$ . When the sequence  $\beta \equiv 1$ , this operator reduces to the ordinary slant Toeplitz operator given by M.C. Ho in 1996. In this paper, we study some algebraic properties of the slant weighted Toeplitz operator. We also obtain its matrix characterization and discuss the adjoint of this operator.

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