## 1125-47-963Faruk Yilmaz\* (yilmaz@math.utk.edu), 227 Ayres Hall. 1403 Circle Drive., Knoxville, TN<br/>37996-1320. Approximation of Invariant Subspaces in Some Dirichlet-type Spaces.

The Dirichlet-type space  $\mathcal{D}_2$  consists of all analytic functions f on the unit disc  $\mathbb{D}$  such that f' is in the Hardy Hilbert space  $\mathbf{H}^2$ . In this talk, we discuss the result that proves that every nonzero invariant subspace of the multiplication operator  $M_z$  on the  $\mathcal{D}_2$  space can be approximated by finite co-dimensional ones. For the Dirichlet space  $\mathbf{D}$  we have a partial analogue. (Received September 13, 2016)