

COMPACT WEIGHTED COMPOSITION OPERATORS INDUCED BY A  
FINITE GROUP OF TRANSFORMATIONS

## Abstract

Let  $X$  be a compact Hausdorff space and let  $C(X)$  denote the space of all continuous complex-valued functions on  $X$  equipped with the Sup-norm. In this work we will study compactness of operators on uniformly closed subspaces  $A$  of  $C(X)$ , which are induced by a finite number of continuous mappings  $\omega_i : X \rightarrow X (i = 1, \dots, n)$  of the form  $T = \sum_{i=1}^n T_i$ , where  $T_i = u_i(f \circ \omega_i)$  are weighted composition operators on  $A$  and give some applications.