



## SUBSPACE-MIXING OPERATORS AND SUBSPACE-WEAKLY MIXING OPERATORS

Mansoorah Moosapoor

Received April 28, 2012

### Abstract

In this paper, we prove some properties of subspace-mixing and subspace-weakly mixing operators. We also show that if  $T \in B(X)$  is  $M$ -transitive,  $T(M) \subseteq M$  and  $M$  has no isolated point,  $M$ -chaotic operators,  $M$ -transitive operators that have a dense set of periodic points in  $M$  and  $M$ -transitive operators with dense generalized kernel in  $M$ , are  $M$ -weakly mixing.

**Keywords and phrases:** subspace-hypercyclicity, subspace-chaotic operators, subspace-mixing, subspace-weakly mixing operators.

Pioneer Journal  
of Mathematics  
and Mathematical  
Sciences



Pioneer Scientific  
Publisher