

On subspace-diskcyclicity

ABSTRACT

In this paper, we define and study subspace-diskcyclic operators. We show that subspace-diskcyclicity does not imply diskcyclicity. We establish a subspace-diskcyclic criterion and use it to find a subspace-diskcyclic operator that is not subspace-hypercyclic for any subspaces. Also, we show that the inverses of invertible subspace-diskcyclic operators do not need to be subspace-diskcyclic for any subspaces. Finally, we prove that every finite-dimensional Banach space over the complex field supports a subspace-diskcyclic operator.

Keyword: Diskcyclic operators; Dynamics of linear operators in Banach spaces