ON THE CLASS OF $n$–POWER $D–m$–QUASI–NORMAL OPERATORS ON HILBERT SPACES

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Abstract. As a continuation of our previous work [22], this paper is devoted to the study for further properties of the class of $(n,m)$-power $D$-normal operators($[(n,m)DN]$) and introduce some classes of operators on Hilbert space called $D–m$-quasi-normal operators and it is denoted by ($[(DQN)^m]$), $n$-power $D–m$-quasi-normal operators and it is denoted by ($[nD(QN)^m]$), associated with a Drazin invertible operator using its Drazin inverse. Some characterizations of $D–m$-quasi-normal and $n$-power $D–m$-quasi-normal operators are discussed. Inclusion relations among the various classes of normal operators are characterized.


Keywords and phrases: $(n,m)$-power normal, $(n,m)$-power quasi-normal, $n$-power $D$-normal, $n$-power $D$-quasi-normal.

REFERENCES