

Some observations on periodic matrices

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Abstract

We recall the concept of a periodic square matrix, see Mirsky (1955), admitting a positive integer power greater than one which is identical to the matrix itself. Some basic observations are given and a discussion of recent results in the literature is carried out, showing the possibility of strengthening and generalizing some of them.

Keywords

Matrix power, Diagonalizable matrix, EP matrix, Normal matrix, Group inverse, Moore-Penrose inverse.

References

Mirsky, L.M. (1955). *An Introduction to Linear Algebra*. Oxford: Clarendon Press. [Reprinted 1990, New York: Dover Publications.]