

Papaschinopoulos, Garyfalos; Schinas, John

A criterion for the exponential dichotomy of difference equations. (English) Zbl 0607.39001
Rend. Semin. Fac. Sci. Univ. Cagliari 54, No. 1, 61-71 (1984).

A linear system of difference equations with constant coefficient matrix has an exponential dichotomy iff none of the eigenvalues of its matrix is of modulus equal to 1. In the case of non constant coefficient matrix this result is not anymore true. In this paper we prove that under some assumptions on the non constant coefficient matrix the above mentioned result is valid.

MSC:

39A10 Additive difference equations

Cited in 4 Documents

Keywords:

linear difference equation; linear system; exponential dichotomy; eigenvalues; non constant coefficient matrix