

**A NEW COMPLEX NON-HERMITIAN ( $2 \times 2$ ) MATRIX UNDER  
DIFFERENT NATURE OF REAL EIGENVALUES : INVERSE  
NATURE**

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We propose a new complex non-hermitian matrix and discuss its different nature of real eigenvalues numerically on selective choice of parameters. Interestingly we notice on certain choice of parameters eigenvalues can be made inverse of each other

.MSC nos-

40 C05 -Matrix Methods

15 Bxx-Special Matrices

15 A12-Conditioning of Matrices

57 Q55-Approximations

97 N40-Numerical Analysis

**Key words-** Complex matrix, Non-hermitian, real eigenvalues, inverse eigenvalues.