Subject: Hermitian Matrices
Posted by Evilio del Rio on Thu, 29 Jan 1998 08:00:00 GMT
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Hello,

I am trying to get the eigenvalues and eigenvectors of an
Hermitian matrix. An hermitian matrix has the property of being
its own transpose-conjugate:

A = CONJ(TRANSPOSE(A)) => A[i,j] = CONJ(A[j,i])

In fact, the real-symmetric matrices are just a special case of hermitian
and finding eigenvalues and vectors should be as easy as for real-symm.,
but all the routines in the IDL standard library ask you for real ones
(symmetric or not, depending on provedure).

Has anybody implemented an equivalent of EIGENQL (or even
ELMHES/HQR/EIGENVEC set)? If not, does anybody know the procedure to
reduce a Hermitian matrix to tridiagonal form (with complex arithmetics)?

Many thanks,

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"Anywhere you choose,/ Anyway, you're gonna lose"- Mike Oldfield