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Subject: Lanczos diagonalisation with IDL  
Posted by [philip.tregenna](#) on Thu, 07 Dec 2006 13:13:19 GMT  
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I would like to diagonalise a large, sparse, symmetric matrix, and find a limited set of eigenvalues. The best way to do this is to use an algorithm based upon the Lanczos method. Has a Lanczos diagonalisation routine been written in the IDL language? The procedure with a functionality close to that which I need is "LA\_EIGENQL". However, this routine is not ideal for large sparse matrices as it requires as input all the elements of the matrix, including those with a value of zero.

Regards,

Philip.

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