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.