

Re: help about ARPACK solver

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andy2O wrote:

– As long as the vectors are parallel then both sets of eigenvectors can be equally correct. I don't think you can say one is 'better' than the other in any sense!! Do you have any reason to prefer one to the other?

As has been written the eigenvectors are undefined up to a scalar complex factor. Therefore if one set of eigenvectors is 'better' than another parallel one the reason for that must come from the application and has nothing to do with the mathematical problem.

In fact it makes sense to always apply some normalization after solving the numerical problem, then you can compare solutions from different solvers easily. This normalization could be a pure mathematical one (i.e. scale the eigenvectors to unity norm), or it could come from the application (e.g. if the eigenvectors are the modal currents of a multiconductor transmission line you could make the per mode transported power equal to 1).

Georg

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