

# help about ARPACK solver

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Hi,

I am now involved in a computational electromagnetics project and have to obtain a few eigenvalues and corresponding eigenvectors of a large non-symmetric complex matrix (2K-by-2K).

I know ARPACK solver is a good choice, and it works now. However, when I compare the eigenvectors from my fortran program and Matlab given by EIGS, I found a big mismatch between them, (but the eigenvalues are OK.) This problem really confused me a lot. Can anyone help me about this?

Thanks!

lorin

PS: The test matrix I used here is generated as following:

```
n = 2000;
mat_r = randn(n, n);
mat_i = randn(n, n);
mat = mat_r + 1i*mat_i;
```

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