Here are new files that I wrote for performance comparisons for the paper.

kssmain - helper function called by testopt2

testopt1 - optimized version of test, that performs only one time step

testopt1N - same as testopt1, for Neumann boundary conditions

testopt2 - optimized version of test, that performs time-stepping

crank - Crank-Nicholson

eulerforward - forward Euler

rk4 - 4th-order

methodwrap - used to run test cases using either crank, eulerforward or

rk4. Sample usage:

[solntime,abserr,relerr]=methodwrap(@crank,N,nsteps,tf,coefs)

methodwrapN - same as methodwrap, for Neumann boundary conditions

refsolnN - same as refsoln, for Neumann boundary conditions

mydct, mydct2, myidct, myidct2 - cosine transform functions for Neumann

boundary conditions