

CPS 5310 Spring 2015
Shirley Moore, Instructor
April 30 In-class Exercise

Stampede and PETSc Exercises

1. Login to Stampede:
`ssh -l <your-xsede-username> login.xsede.org`
`gsissh -p 2222 stampede.tacc.xsede.org`
2. Load the PETSc module and check the environment variables:
`module load petsc`
`echo $PETSC_DIR`
`echo $PETSC_ARCH`
3. Make a petsc directory with ksp and ts subdirectories
`mkdir petsc`
`cd petsc`
`mkdir ksp`
`mkdir ts`
4. Copy PETSC example ts/ex4.c and the makefile to your petsc/ts directory:
`cd ts`
`cp $PETSC_DIR/src/ts/examples/tutorials/ex4.c .`
`cp $PETSC_DIR/src/ts/examples/tutorials/makefile .`
5. Build the ex4 executable:
`make ex4`
6. Run the ex4 example with 4 processes using either a batch script or an interactive job (follow the directions in the Stampede User Guide).
7. Copy, build, and run the ksp/ksp/ex2.c example in a similar manner.
8. Try experimenting with different PETSc command-line options (See the PETSc User Manual for details).