

# Demo for Franklin Usage

- Get Franklin account (send us your information: First and Last names, nationality, phone, address, and email address)
- login  
`ssh franklin.nersc.gov`
- All the run should be performed using scratch space  
`cd /scratch/scratchdirs/<your_login_id>`
- Copy data from your desktop to Franklin (on your desktop)  
`scp pillbox.o3p m.ncdf franklin.nersc.gov:/scratch/scratchdirs/<your_login_id>`
- Job Creation. Franklin is a supercomputer. It has a scheduler to run computational jobs. That means user has to use a job submission script to run a job. Once a job is submitted, the scheduler will decide when and where the job will be executed.  
The following is a sample script. You can find it at `~llee/.community/run.pbs`. Note that you can find `omega3p`, `s3p`, `tfe3p` and `acdttool` executable for Franklin at directory `~llee/.community/`.

```
#PBS -N test
#PBS -q regular
#PBS -l mppwidth=128
####PBS -l mppnppn=4
#PBS -l walltime=00:30:00
#PBS -j eo
cd $PBS_O_WORKDIR
aprun -n 128 ~llee/.community/omega3p pillbox.o3p | tee std
```

- Submit the job  
`qsub run.pbs`
- Look at the status of the batch jobs  
`qstat -u <your_id>`
- Cancel a job  
`qdel <job_id>`
- Copy the results back to your Desktop (on your desktop)  
`scp franklin.nersc.gov:/scratch/scratchdirs/<your_login_id> </code> /* .`