

OpenMP

- ▶ Portable code for shared-memory parallelism (“threading”)
 - Multi-core workstations, HPC, etc.
 - Not frightening
- ▶ Often need to explicitly use a compiler flag to enable OpenMP support
 - GNU (Fortran/C/C++): `gcc -fopenmp`
 - IBM (Fortran/C/C++): `xlc -qsmp=omp`
 - Intel (Fortran/C/C++): `icc -openmp`
 - PGI (Fortran/C/C++): `pgcc -mp`
 - Cray:
 - LLVM/Clang (C/C++): OpenMP support is somewhat optional
 - Xcode (Mac OS X) does not seem to have OpenMP support
- ▶ Vectorization support is coming (`#pragma omp simd`) in OpenMP 4.0/4.1
 - GCC 4.9+
 - Intel 15+
 - LLVM/Clang 3.7+
- ▶ edison.nersc.gov:/project/projectdirs/lsst/apope/OpenMP

