

# Compiling Software on Supercomputers

## Parallel HDF5 on Mahuika

### Parallel HDF5 on Mahuika with Python

```
# modules
module load Python/3.6.3-gimkl-2017a
module load impi/2017.6.256-GCC-5.4.0
module load GCC/5.4.0
module remove HDF5/1.8.18-gimkl-2017a

# hdf5
cd src/hdf5-1.8.18
./configure --prefix=/nesi/project/nesi00213/opt/mahuika/hdf5-parallel/1.8.18 --enable-parallel
make install
export LD_LIBRARY_PATH=/nesi/project/nesi00213/opt/mahuika/hdf5-parallel/1.8.18/lib:$LD_LIBRARY_PATH

# h5py
cd src/h5py-2.7.0
python setup.py configure --mpi --hdf5 /nesi/project/nesi00213/opt/mahuika/hdf5-parallel/1.8.18
python setup.py build
export PYTHONPATH=/nesi/project/nesi00213/opt/mahuika/python-packages/lib/python3.6/site-packages
python setup.py install --prefix=/nesi/project/nesi00213/opt/mahuika/python-packages
```