

## Gromacs 2016.1 for GPU

### Webpage

<http://www.gromacs.org/>

### Version

2016.1

### Tools for Compiling

- Intel Compiler 16.0.2
- Cuda compilation tools, release 7.5, V7.5.17
- cmake 2.8.12
- g++ (GCC) 4.9.2

### Necessary Files for Compiling

- gromacs-2016.1.tar.gz

### Procedure of Compiling

```
#!/bin/csh -f
umask 022
set file_gromacs=/home/users/${USER}/build/gromacs2016.1/gromacs-2016.1.tar.gz
set prefix=/local/apl/pg/gromacs2016.1-CUDA
set work=/work/users/${USER}
#-----
cat <<EOF | scl enable devtoolset-3 csh
source /opt/intel/composer_xe_2015.2.164/bin/compilervars.csh intel64
cd ${work}
if (-d gromacs-2016.1) then
  mv gromacs-2016.1 gromacs-erase
  rm -rf gromacs-erase &
endif
tar xzf ${file_gromacs}
cd gromacs-2016.1
#
setenv CC icc
setenv CXX icpc
setenv F77 ifort
setenv F90 ifort
setenv FC ifort
mkdir rccs-gpu
cd rccs-gpu
cmake28 .. -DCMAKE_INSTALL_PREFIX=${prefix} \
  -DCMAKE_VERBOSE_MAKEFILE=ON \
  -DGMX_MPI=OFF \
  -DGMX_GPU=ON \
  -DGMX_DOUBLE=OFF \
  -DGMX_FFT_LIBRARY=mkl \
  -DREGRESSIONTEST_DOWNLOAD=OFF
make -j 12
make install
cd ..
EOF
```