Example of batch jobs submitted in different directories (A. Sandvik, 9/6/2024)

More at: **https://www.bu.edu/tech/support/research/system-usage/running-jobs/submitting-jobs/**

Contents of current directory by "ls":

```
Random64.jl  r01  r02  r03  r04  r05  res.dat  submit  wolff.jl  wolff.sh
```

We want to run the Julia program Wolff.jl from all the directories r01,…,r05
- the purpose is to generate statistical data that we combine later on

The jobs are submitted to the by "source submit", where submit is a Linux script file looking like this

```
module load julia
X1=1
X2=5
X=$X1
while((X<=$X2))
do
cd r0$X
qsub  -l h_rt=1:00:00 ../wolff.sh
cd ..
let X=X+1
done
```

The line containing the command submitting to the SCC batch queue is

```
qsub  -l h_rt=1:00:00 ../wolff.sh
```

where -l h_rt=1:00:00 specifies the run time (wall clock) time 1 h max
- jobs requiring less than 12 h will have higher priority than longer runs
- Other -l options can also be given; see the SCC web site

The submitted file is wolff.sh, which contains

```
julia ../wolff.jl
exit
```

Upon typing "source submit", we get these messages:

```
Your job 9818511 ("wolff.sh") has been submitted
Your job 9818512 ("wolff.sh") has been submitted
Your job 9818513 ("wolff.sh") has been submitted
Your job 9818514 ("wolff.sh") has been submitted
Your job 9818515 ("wolff.sh") has been submitted
```

The jobs will write their output in the directories r01,…,r05

You can check the status of all your jobs by

```
qstat -u yourusername
```
You will see "r" for running and "qw" for waiting