NFFT

Please note: These instructions were written for NFFT 3.4.1.

NFFT is available as a module on the cluster system. However, there may be situations where you need to compile your own version. For example if you need the MATLAB interface as mex file. When compiling from source, take into account that the cluster system's CPU architecture is heterogeneous and you best compile a version for every architecture you will be using in order to avoid problems, see section 8.1.

Execute the following commands to load prerequisites.

```
$ module load foss/2016a FFTW/3.3.4 gompi/2016a
```

Download the NFFT sources and change to the directoty containing nfft-3.4.1 sources. Execute the following commands in order to build NFFT with MATLAB 2018a interface. Substitute zzzzsaal with your own user name.

```
$ ./configure --prefix=/bigwork/zzzzsaal/nfft/nfft-3.4.1-compiled
--with-matlab=/sw-eb/apps/software/haswell/Core/MATLAB/2018a/
$ make
$ make install
```

You end up with libnfft.mexa64 located in the lib directory. Use it as detailed here. In order to test your build, start the MATLAB version you built for.

```
$ module load MATLAB/2018a
$ matlab -nodisplay -nosplash
```

Inside MATLAB issue the following commands. Change zzzzsaal to your user name.

```
>> addpath(genpath('/bigwork/zzzzsaal/nfft/nfft-3.4.1-compiled/lib'))>> cd
/bigwork/zzzzsaal/nfft/nfft-3.4.1-compiled/share/nfft/matlab/nfft/>>
simple_test
```

From:
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Permanent link:
https://docs.cluster.uni-hannover.de/doku.php/guide/soft/nfft

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