

## **Wikiprint Book**

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## General information

### Modules

Based on the requirements by the DEEP-EST applications several software tools have already been installed on the DEEP system/DEEP-ER SDV. To see which modules are available use

*module avail*

For most tools and compilers there are several versions available, you can list the different versions of a specific tool with `module avail ?tool name?`, for example

```
-bash-4.1$ module avail intel
----- /usr/local/modulefiles/COMPILER -----
intel/13.0.4      intel/15.0      intel/16.0      intel/16.3      intel/17.1      intel/18.0
intel/14.0.3      intel/15.2.164  intel/16.2(default)  intel/17.0      intel/17.2      intel/18.1
```

You can load a specific version or just use the default with for example

*module load intel*

The modules which are currently loaded can be listed with the command `?module list?`. To unload a module just type `?module unload?` followed by the name of the module.

### Compiler

There are several compilers available, but as it is highly recommended to use the Intel compiler on the KNC system it might be best to also use it on the DEEP system.

Installed compilers:

- Intel compiler: `module load intel`
- GNU compiler: `module load gcc`
- PGI Compiler: `module load pgi`

### Profiling and analysis tools

- Intel VTune: `module load VTune`
- Intel Advisor: `module load Advisor`
- Intel Inspector: `module load Inspector`
- ScoreP: `module load scorep`
- Darshan: `module load darshan`
- Extrae: `module load UNITE extrae`
- Scalasca: `module load UNITE scalasca`

### MPI programs

It is recommended to use the [ParaStation?](#) MPI installation.