#### Installation

- Installation
- Requirements
- Getting the code
- Setting path
- Update the code

#### Requirements

MPI-AMRVAC is in use on Mac laptops, Unix desktops, and modern supercomputing facilities. The following software is required:

- · A Fortran compiler, e.g. gfortran or ifort
- An MPI library, e.g. OpenMPI or intel MPI
- perl for the VACPP preprocessor (standard on Unix-based platforms)
- · git to download and update the code

## **Getting the code**

To install the code in folder ~/codes/amrvac:

```
cd ~/codes
git clone https://github.com/amrvac/amrvac.git
```

# Setting path

To use MPI-AMRVAC, the installation directory must be exported as an environment parameter called AMRVAC\_DIR and this variable can be added to the command searching path. To do so using bash, you should add the following line to your ~/.bashrc file (or perhaps ~/.profile in mac OS):

```
export AMRVAC_DIR=$HOME/codes/amrvac
PATH="$PATH:$HOME/codes/amrvac:$HOME/codes/amrvac/tools"
```

You can then activate the setting by sourcing this file (or you can close and open a new terminal shell),

source ~/.bashrc

## Update the code

It is recommended to update the code regularly to benefit from new improvements and new features which are continuously developed. To update the code:

```
cd ~/codes/amrvac
git pull
```

If you modified any source code of amrvac, which has an updated version, "git pull" will fail to update the code. You can give up your modification by "git checkout your\_modified\_file" after making a copy of your own version (if you want to keep it), then update the code. If you want to contribute your modification of the code, please read @ref contributing.md for more information.