Clean code (beautifier)

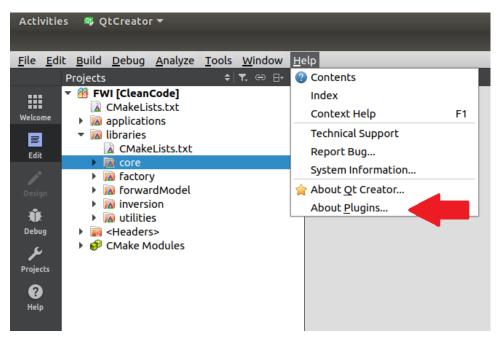
It is decided to use style tooling for formatting the C++ code. This is chosen so that developers don't need to worry about style issues during code reviews.

Implementation Clang-Format in the pipeline TODO!

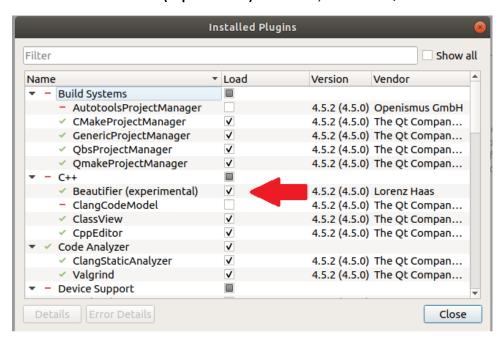
Implement for your IDE

A) Plugin in Qt Creator

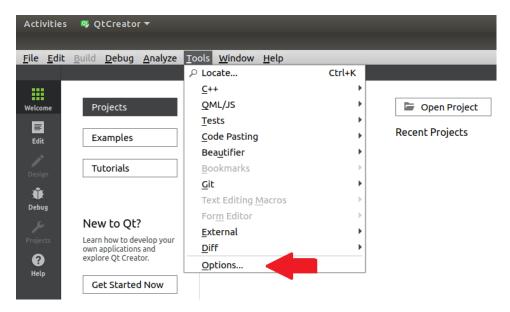
1. Open Qt Creator, go to Help, and select About Plugins...



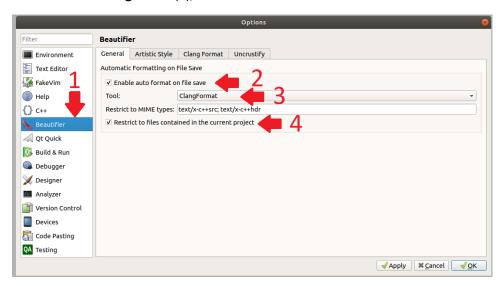
2. Select Beautifier (experimental) under C++, and close Qt Creator.



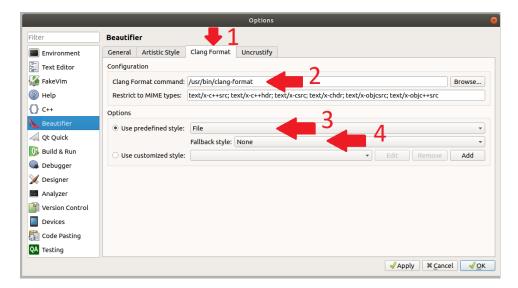
3. Open Qt Creator, go to Tools, and select Options...



4. In Options select Beautifier (1). In the General tab, check Enable auto format on File Save (2), select ClangFomat (3), and check Restrict to files contained in the current poject (4).



5. In this window select tab **Clang Format** (1). Verify if **Clang Format command** (2) is correctly filled in. Select option **File** in **Use predefined style** (3) and select **None** as **Fallback style** (4). Note: Clang-Format automatically searches for the .clang-format file in the (parent) directory.



B) Clang Format in other IDE's

In most IDE's a Clang-format plugin is available that works in a similar way as described above. It is important to **select predefined style by file**. Clang-Format will than automatically search the style format file.

Change the style format

The style used by Clang-Format is implemented in the .clang-format file in the parallelized-fwi. This file has no name, and is thus simply called .clang-format. In Ubuntu it is a hidden file, but it can be shown by clicking Crtl + H. Note: the version of Clang-Format is decisive for commands that can be used. Unfortunately, I had to remove some commands for this reason.