

### code\_saturne 8.3 Quick reference card

## User scripts

All code\_saturne commands are available under a single script: code\_saturne. Here below are the most useful commands for a code\_saturne user from the study creation to the postprocessing. Complete information for each command can be obtained by typing: code\_saturne <command> --help.

#### • info

Get information on code\_saturne. Open the documentation (user, theory). e.g. code\_saturne info --guide user

#### • config

Get information on the configuration and installation of code\_saturne. *e.q.* code\_saturne config

• create Create a code\_saturne template study or case. e.g. code\_saturne create --study study1 • gui Launch code\_saturne graphical user interface. *e.g.* code\_saturne gui --file *xmlfile* 

• trackcvg Launch code\_saturne track convergence tool. *e.g.* code\_saturne trackcvg RESU/run\_name

• compile Create a specific solver executable when some user subroutines are present. *e.g.* code\_saturne compile --test

• studymanager Launch studymanager. *e.g.* code\_saturne studymanager --file *xmlfile* --run

## Main user subroutines

Here below are the most useful user subroutines to run a standard simulation. Some of them are useless if the graphical user interface is used.

• cs\_user\_parameters.c Initialization of the main keywords.

• cs\_user\_boundary\_conditions.c Management of the boundary conditions. • cs\_user\_physical\_properties.c Management of the variable physical properties.

• **cs\_user\_initialization.c** Non-standard initialization of the variables.

• cs\_user\_extra\_operations.c User project files.

• cs\_user\_head\_losses.c Management of the head loss.

• cs\_user\_source\_terms.c User source terms related subroutines.

• cs\_user\_postprocess.c Post-processing related subroutines.

# **Practical information**

https://www.code-saturne.org

Related software: https://www.salome-platform.org

