***Code_Saturne***
## 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 post-processing. 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.g.* `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.f90**

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`