

Computing and Data Analysis Project

Launching day

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Master 2 STPE

ISTerre, Univ. Grenoble Alpes

Outline

What? Who? When? How?

The project more in details

Evaluation/grades

short-term schedule

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What? (I)

Computing and Data Analysis Project is a project-oriented course dedicated to work in depth on

- numerical modeling
AND/OR
- signal processing
AND/OR
- machine learning for data science
AND/OR
- data assimilation

What? (II)

Computing and Data Analysis Project can be seen as the *part II or application part* of the following courses

- Numerical Modeling (for M2 GAEI & SCAHC)
- Advanced Machine Learning in Earth Sciences (for M2 GAEI, SCAHC & NGHR)
- Advanced signal Processing (for M2 GAEI)
- Data Assimilation in Geosciences (for M2 SCAHC)

Who?

As a *project-oriented* course

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- **you** work

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- **you** work
- alone and autonomously

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- on **your** project
- supervised by one advisor (among P. Boue, R. Brossier, E. Chaljub, E. Cosme, L. Moreau, and possibly others)
- Course coordinators:
 - R. Brossier <romain.brossier@univ-grenoble-alpes.fr>
 - E. Cosme <Emmanuel.Cosme@univ-grenoble-alpes.fr>

When?

- Starting of the project : beginning of october

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- Until mid-January

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- you must be able to explain the content of your report and your presentation.
- Misuse of an LLM is easy to spot and will be severely penalized.

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-
- Step 1 : select a topic of project
 - Step 2 : select a “physical” subject, which should provide the mathematical background/data type to consider
 - Step 3 : select a coding language or tool

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- One grade (CC) related to the reports + implication (coef 0.5)
 - one 2-pages status document to provide end of November. The idea is to present your project subject + short sum-up of the achieved work so far, and remaining tasks
 - one final report to provide begining of January
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- One grade (ET) associated to an oral presentation (mid-end January, coef 0.5)

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- your definitive choice + supervisor info should be provided around 10th of October
- the project should then start