For all your research projects it will be nice to establish a scientific proposal for the next months in about 10 days.

So read (a lot) previous related project (MID2SUPAERO) or search for scientific papers/MsC/PhD thesis (google scholar)

Let's take an example

Email of Student 1

Oh prof I ve got an idea: Why not trying to reduce this complex cost of transient flutter simulation, it's really costly to use it on preliminary design in order to apply to this nice Airbus project Maverik

https://www.airbus.com/newsroom/press-releases/en/2020/02/airbus-reveals-its-blended-wing-aircraft-demonstrator.html

I have seen related project on the GitHub

By typing "aeroelasticity"
https://github.com/mid2SUPAERO?q=aeroelasticity&type=&language=

I found this on scaled Aircraft
https://github.com/mid2SUPAERO/Masters-Project-Part-2

https://github.com/mid2SUPAERO/aerostructures (do you have tutorials on this? I know that sometimes repo are private) and the thesis here
https://tel.archives-ouvertes.fr/tel-02023612

Oh I've got this paper through nomadoc and I found these 3 papers. I want to focus on it
https://arc.aiaa.org/doi/abs/10.2514/1.C033171?casa_token=Oiva34ylgvgAAAAA:RZ4OqtQSv_3ykSaXMcQkbugjNhTRa_P911lTaLHIreUTq36DpIrb0mpe9ygLKdHXeVcn55qSsg

https://www.emerald.com/insight/content/doi/10.1108/AEAT-06-2019-0129/full/html

https://arxiv.org/pdf/1911.10043.pdf

I really want to understand the aeroelasticity of this 3m span BWB called maveric !!

I might start with Airfoil simulation to learn easily in 2D, no ?

PS: BTW this airbus project is really nice too
https://www.airbus.com/newsroom/stories/the-albatross-is-inspiring-tomorrows-next-generation-of-aircraft-wings.html

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My response for student 1

Oh prof I ve got an idea: Why not trying to reduce this complex cost of transient flutter simulation, it's really costly to use it on preliminary design in order to apply to this nice Airbus project Maverik

https://www.airbus.com/newsroom/press-releases/en/2020/02/airbus-reveals-its-blended-wing-aircraft-demonstrator.html

Yes, GO AHEAD

I have seen related project on the GitHub

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https://tel.archives-ouvertes.fr/tel-02023612

I can give you an access to aerostructures tutorials and give you emails of students that are working on it. (Also on channel #aeroelasticity on slack)

Oh I've got this paper through nomadoc and I found these 3 papers. I want to focus on it
https://arc.aiaa.org/doi/abs/10.2514/1.C033171?casa_token=Oiva34ylgvgAAAAA:RZ4OqtQSv_3ykSaXMcQkbugjNhTRa_P911lTaLHlreUTq36DpIrb0mpe9ygLKdHXeVcn55qSsg

https://www.emerald.com/insight/content/doi/10.1108/AEAT-06-2019-0129/full/html

https://arxiv.org/pdf/1911.10043.pdf

Ok be sure to use open source library with tutorials and documentation such as SMT (our framework with ONERA and some US partners) for deep learning
https://smt.readthedocs.io/en/latest/

Try also to have a look to reference work such as
https://scholar.google.com/citations?hl=fr&user=e1eYSTcAAAAJ&view_op=list_works
Or course here
https://web.stanford.edu/group/frg/course_work/CME345.html

I really want to understand the aeroelasticity of this 3m span BWB called maveric !!

Definitely! May be Some Airbus Engineers might be interested in your work !

I might start with Airfoil simulation to learn easily in 2D, no ?

Yes always try to validate your code on a reference paper results or on simple testcase 2D Airfoil is a good one.

PS: BTW this airbus project is really nice too