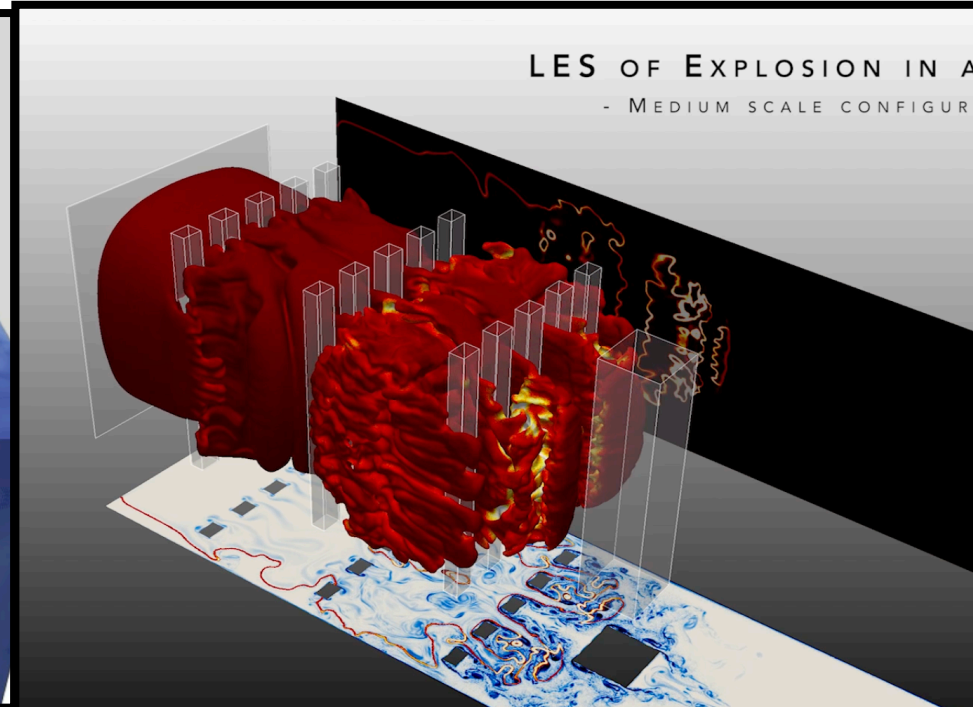
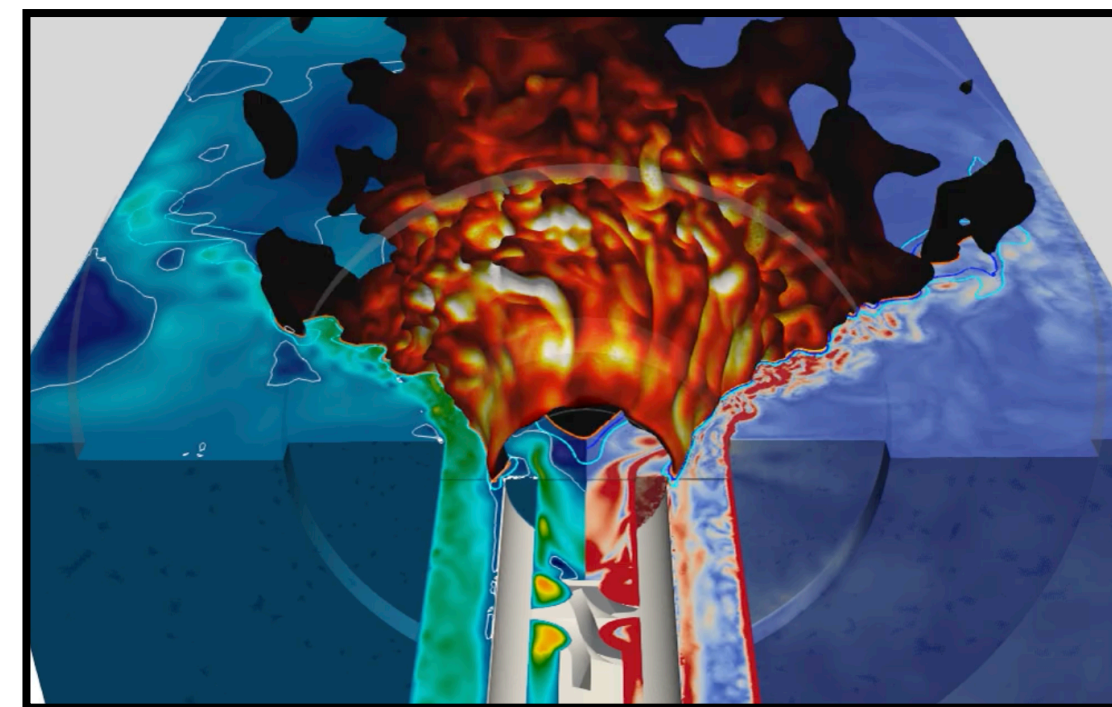
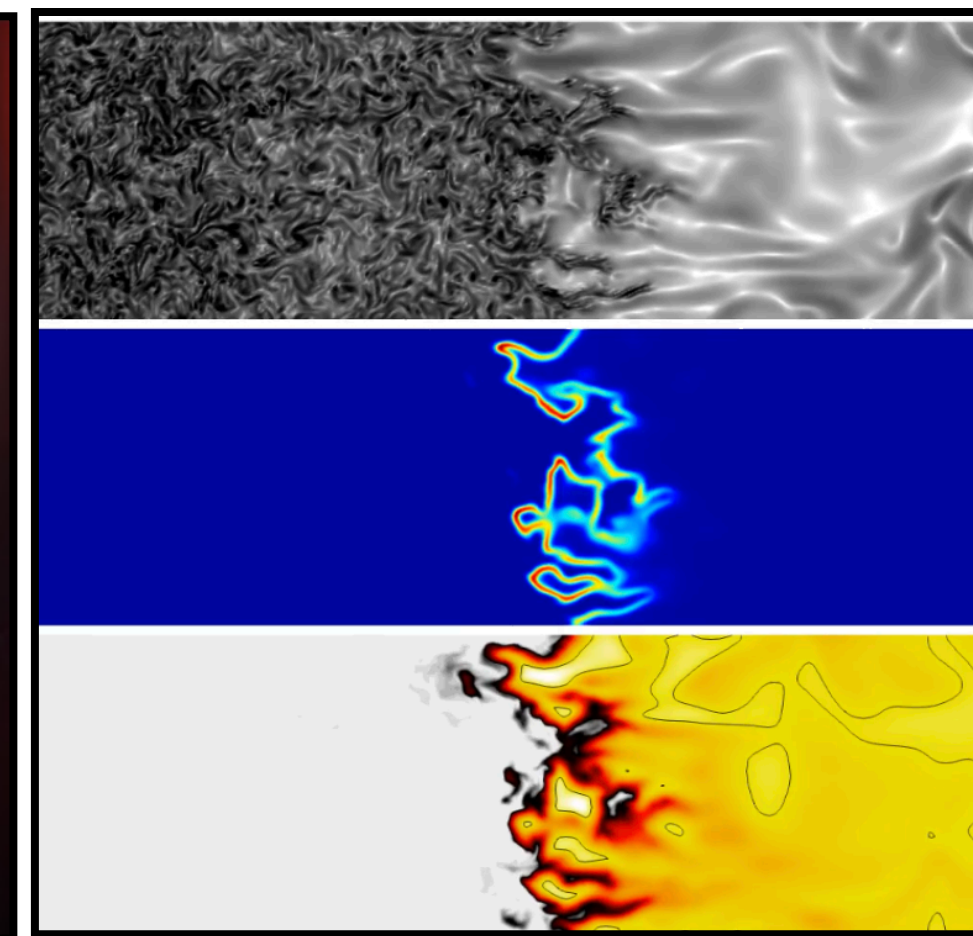
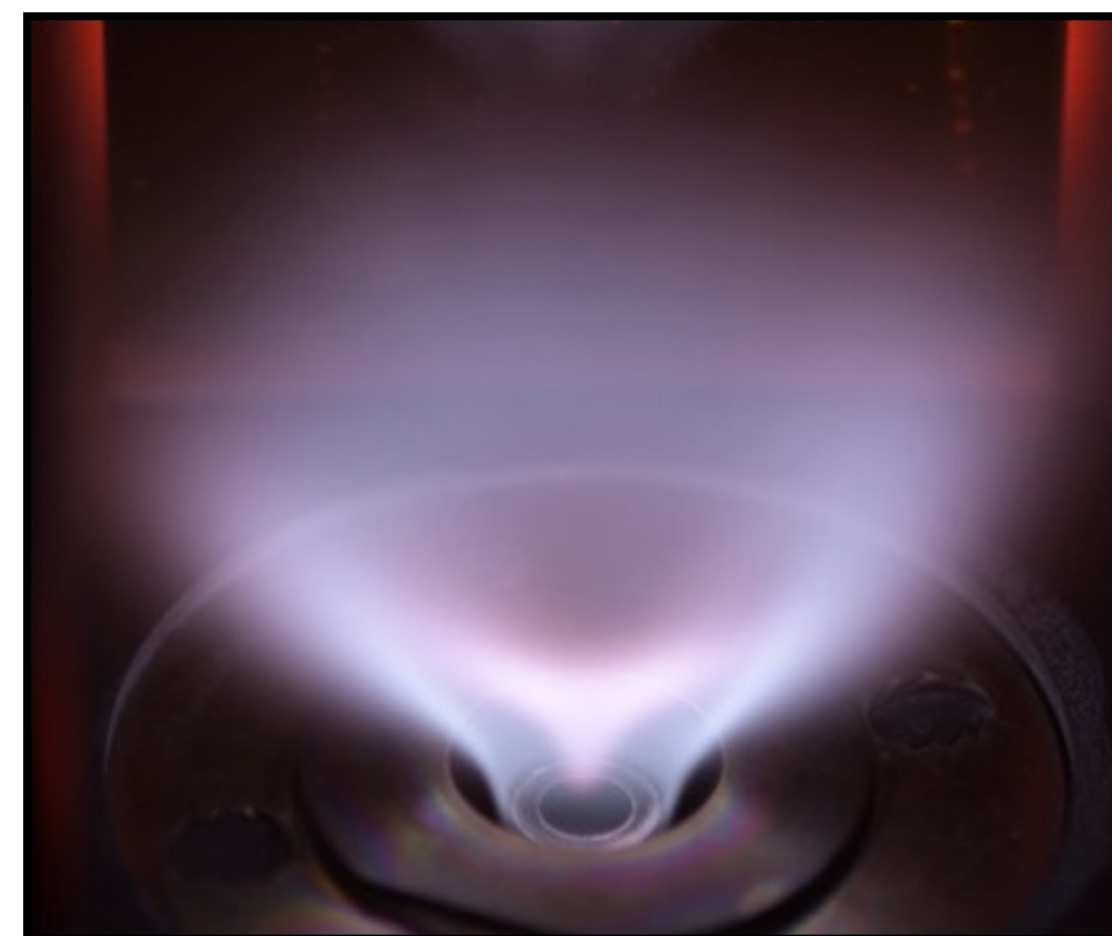


# HYDROGEN WEEK: TUESDAY TRAINING ON H2

Speakers: T. Schuller, L. Selle, T. Poinso - IMFT  
Q. Douasbin, O. Dounia, T. Jaravel - CERFACS  
T. Guiberti - KAUST

Organization: M. Chen, D. Guleryuz, T. Riou, M.  
Durand, K. Chaplet, S. Marragou, H. Magnes, H.  
Paniez, M. Sabater, T. Schuller, L. Selle, T. Poinso -  
IMFT and CERFACS

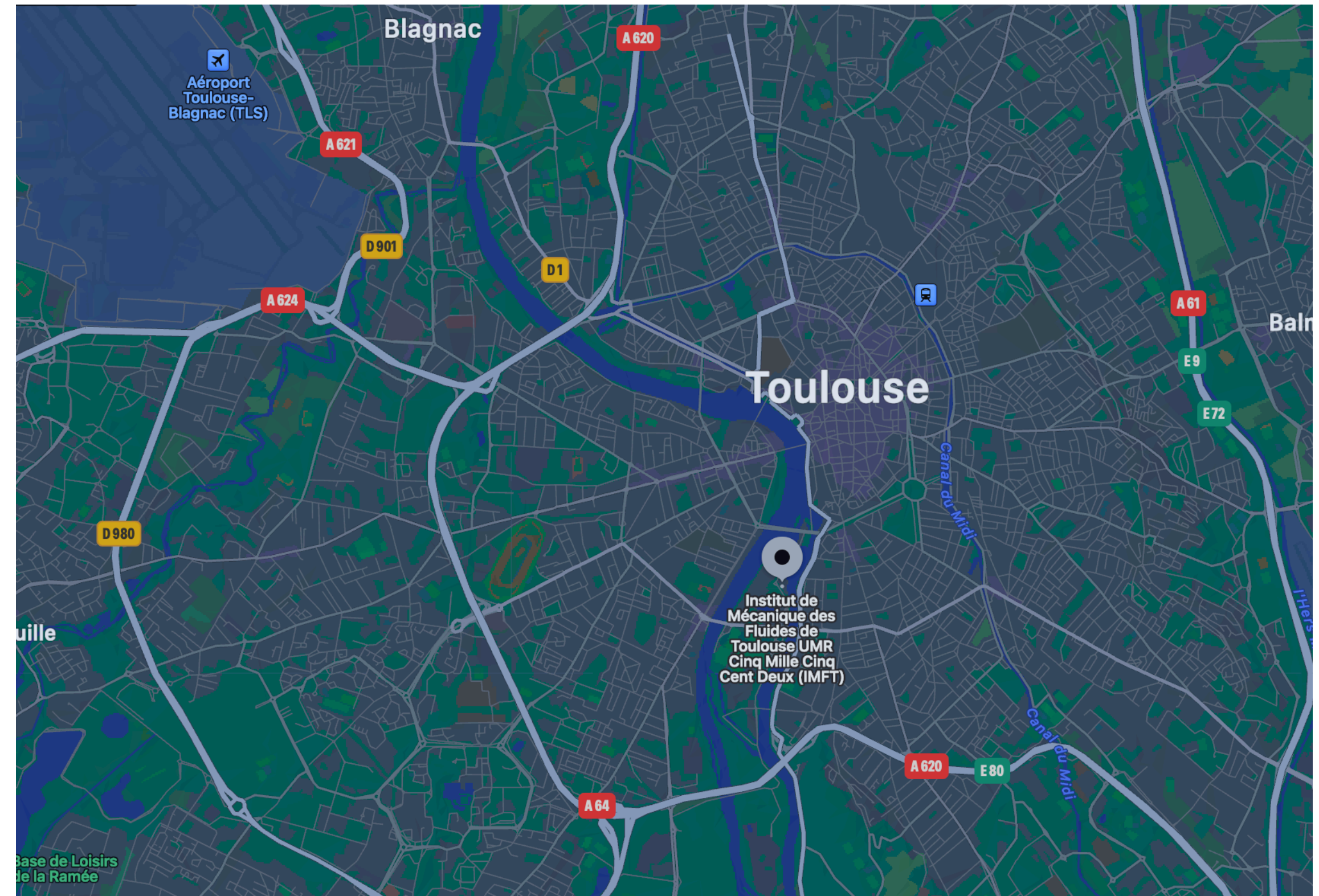


Support: CLEAN AVIATION EU Program, ERC advanced grants **SCIROCCO (2019-2024)**,  
**SELECT-H (2023-2028)**, SYNERGY ERC grant **HYROPE (2024-2030)**

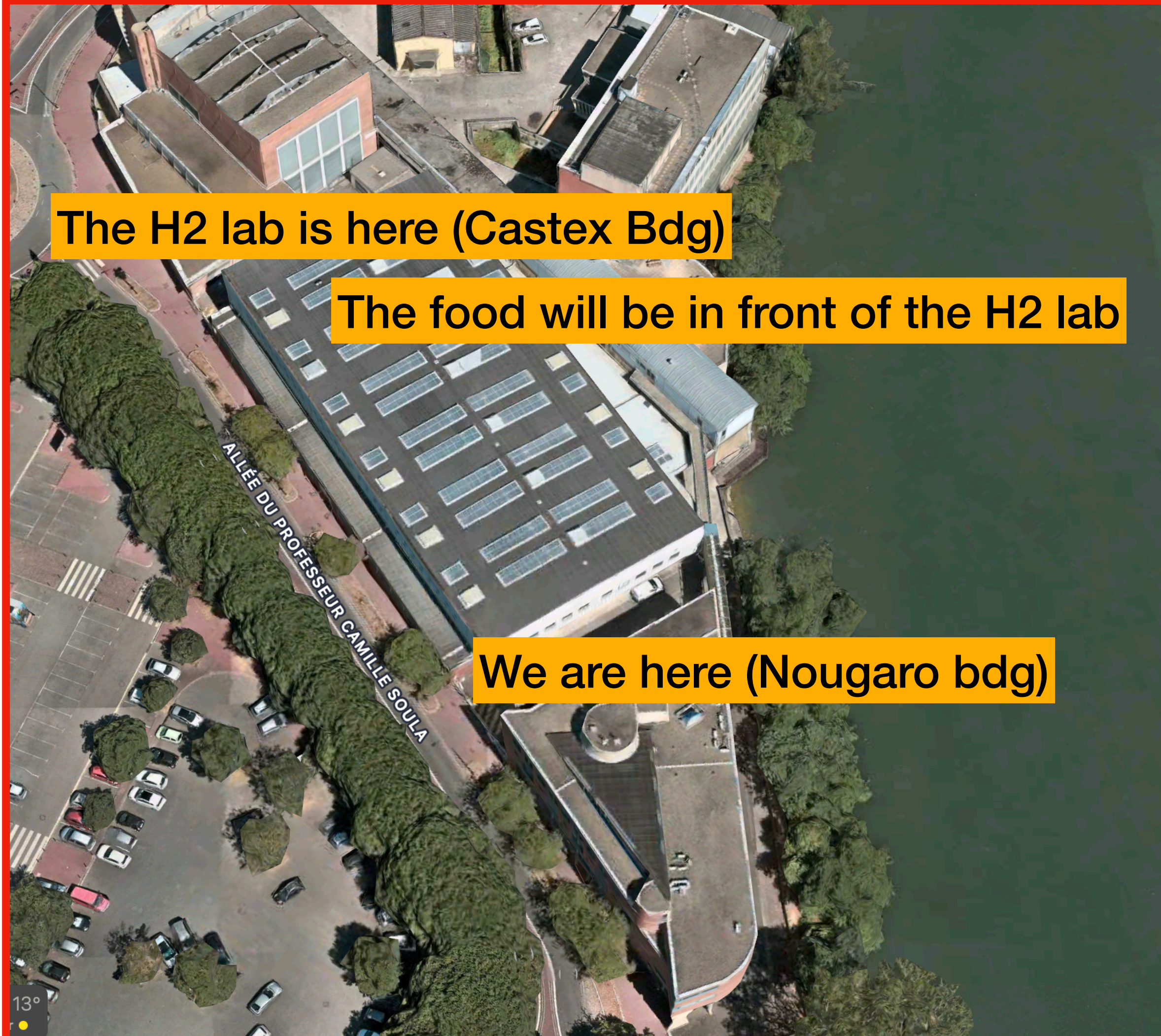




# WELCOME TO TOULOUSE AND IMFT









# PROGRAM OF TRAINING DAY - H2 WEEK

9.00-9.30 Overview of hydrogen specificities: L. Selle, IMFT

9.30-10.00 CFD modeling of hydrogen flames: T. Poinsot, IMFT

*10.00- 10.30 Coffee break*

10.30-11.15 Hydrogen, from deflagration to detonation. O. Dounia, CERFACS

11.15-12.00 Running experiments with hydrogen: T. Schuller, IMFT

*12.00-14.00 LUNCH AND VISIT/DEMO OF THE HYDROGEN LAB EXPERIMENTS*

14.00-15.00 Running high-pressure experiments with hydrogen, stabilization of hydrogen air flames at all pressures: T. Guiberti, KAUST

*15.00-15.30 Coffee Break*

15.30-16.30 CFD tool specificities for H<sub>2</sub> flames and available/recommended models in AVBP for hydrogen/air flames. Q. Douasbin and T. Jaravel, CERFACS

16:30-17.30 Discussion on CFD codes for H<sub>2</sub> flames. All



# VISITS OF THE HYLON SETUP

*The visits of the lab will take place during the lunch breaks, tuesday, wednesday and thursday*

*There is a number on your badge: this is the number of the group for the visit.*

*Every day, we will call 3 groups to visit HYLON (at 13.00, 13.20 and 13.40): pay attention while you eat.*

*You can take pictures but please do not touch anything: advice for CFD guys - > these flames really burn !*



# GROUP SCHEDULES FOR HYLON VISIT

<b>DAY/HOUR</b>	<b>13.00</b>	<b>13.20</b>	<b>13.40</b>
<b>TUESDAY</b>	GROUP 1	GROUP 2	GROUP 3
<b>WEDNESDAY</b>	GROUP 4	GROUP 5	GROUP 6
<b>THURSDAY</b>	GROUP 7	GROUP 8	GROUP 9

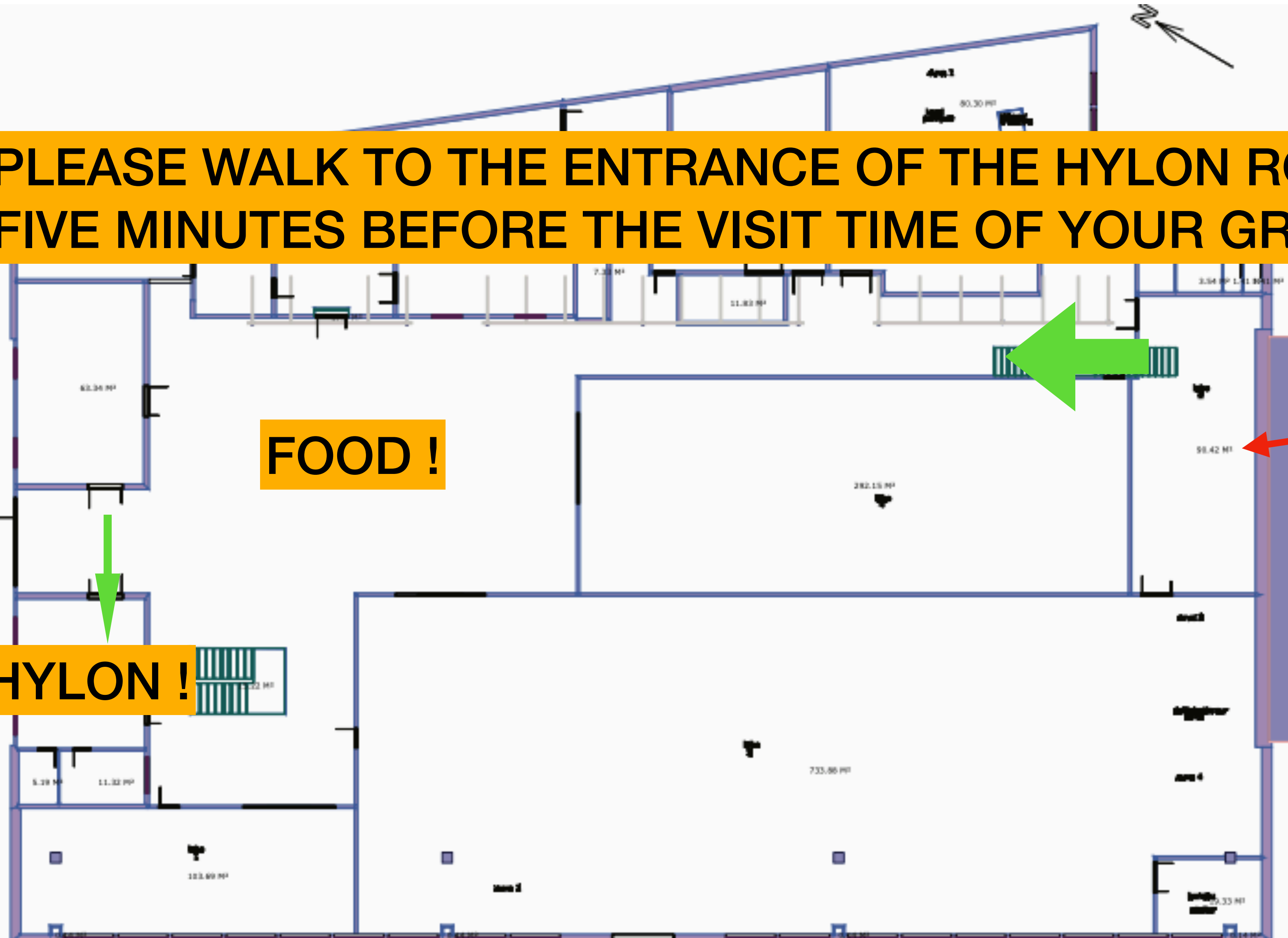


# WHERE DO WE EAT AND WHERE IS HYLON ?

PLEASE WALK TO THE ENTRANCE OF THE HYLON ROOM FIVE MINUTES BEFORE THE VISIT TIME OF YOUR GROUP

FOOD !

HYLON !





# GROUP PICTURE

*We will have a group photograph wednesday just before lunch  
at the place where we eat in the CASTEX building*



# FOR TOMORROW'S PRESENTATIONS

9.00 A. Tyliszczak (CZESTOCHOWA UNIVERSITY OF TECHNOLOGY)

9.20 N. Bertier and J. Ruan (ONERA)

9.40 A. Van-Bruygom, A. Walker and A. Garmory (LOUGHBOROUGH)

10.00 A. Ballotti and A. Andreini (UNIFI)

*10.20 BREAK*

10.50 C. Mehl (IFPEN)

11.10 F. Ghioldi and F. Piscaglia (POLIMI)

11.30 I. Mir, S. Zhao and P. Boivin (M2P2 MARSEILLE)

11.50 J. Massey (CAMBRIDGE)

*12.10 LUNCH AND PHOTOGRAPH IN CASTEX BUILDING*

14.00 L. Palanti and L. Mazzei (ERGON RESEARCH)

14.20 W. Jones (IMPERIAL COLLEGE)

14.40 M. Vilespy (IMFT), A. Aniello (IMFT) and N. Rouland (CERFACS)

15.00 S. Dillon (EM2C), V. Moureau (CORIA) and R. Mercier (SAFRAN TECH)

*15.20 BREAK*

15.50 D. Bessette, S. Patil (ANSYS), K. Vasudevarao and Y. Zhang (GE)

16.10 V.R. Hasti (NORTH CAROLINA STATE)

16.30 S. Nambully, R. Kulkarni and D. Lee (CONVERGENT SCIENCE)

16.50 Cross comparison of results, future work, presentation at the TNF workshop in Milano.



***We asked for two types of information:***

- the csv files to compare results: Theo and Kennie gather all this but if they dont have them today before 5 pm... too late***
- the ppt files: we need to have all of them tonight so that you can present tomorrow. With the proposed schedule, the need to zoom at the same time, we cannot change computer between presentations***



***In the ppt files to send to [martin.vilespy@imft.fr](mailto:martin.vilespy@imft.fr), we need global information such as:***

- type of computation (compressible vs low Mach)***
- chemical scheme (the one used in the 3D code)***
- minimum mesh size***
- number of CPU hours for 1 ms of physical time***
- time used for averaging in your results***
- wall treatment***

***Theo and Kennie will contact you if they don't have this data. Please respond asap. We would like to show this thursday morning***