

Sixth workshop on Energy for Sustainable Science in Research Infrastructures ESSRI

29-30 September 2022

Organized by CERN / ESS / DESY / PSI / ERF,

Hosted by ESRF

Closing remarks

JL Revol

On behalf of the International and Local Organising Committee



The European Synchrotron

The analysis of the situation is clear

We need to act on the climate change

We need to adapt more the production to the consumption and vis versa (flexibility)

We need to see the bigger picture

We need to react to the increased energy cost

Means and tools are there

Technology is there (or almost there)

Methodology and tools are there (or almost there)

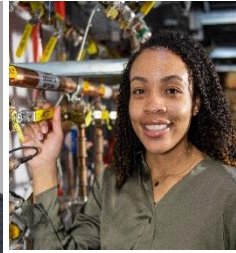
Investment is often associated to an increase of performance

Funding from EU or national gov for efficiency and sustainability is showing

What next ? or what is missing?

- We have to conduct new projects and new designs with efficiency and sustainability in mind but also as a primary specification
- Integrated technical, experimental and human behaviour is progressing but must be enhanced toward higher flexibility
- We have to measure our scientific productivity also as a function of the energy consumption
-

A BIG THANKS TO ALL SPEAKERS



For the contents of
the talks and for
being on time



A BIG THANKS TO ALL PARTICIPANTS

We tried to provide the best canvas and support for this workshop but the real success of the workshop is you (*we will ask for your feedback*).
It was a real pleasure to run the workshop with such enthusiastic and participating participants.
We hope that you are going back with new (or confirmed) ideas and that you will make all the efforts to implement it



Many thanks also to the remote participants

A BIG THANKS TO THE ASSISTANTS



We would not be able to prepare and run this workshop without the indefectible support of Sandra, Philippa and Anne-Francoise



A young (28 years old) and talented Maitre-Chocolatier

Our mission is also to promote the young generation !!

Of course
black !!

A BIG THANKS TO MY COLLEAGUES OF THE IOC

Serge



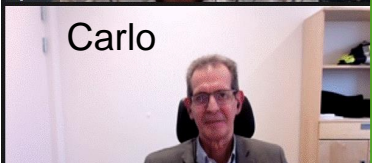
Denise



Frederick



Carlo



Mike



It was a real pleasure to prepare and run this workshop with the efficient and enthusiastic contribution Denise, Frederick, Serge, Mike, Carlo



chartreuse grapes coated with chocolate



A young (28 years old) and talented Maitre-Chocolatier

Our mission is also to promote the young generation !!

Of course green

A BIG THANKS FRANCOIS MY COLLEAGUE OF THE LNCMI



Francois was a real local support who help us to prepare the programme and really support me during the (few) crisis



chartreuse grapes
coated with chocolate



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Of
course
green

ESRF AND LNCMI VISIT ON FRIDAY AFTERNOON

Presenters:

ESRF Control Room

Jean-Luc



ID32 Beamline

Flora



LNCMI

Francois



SSA RF stations

Pawel



Visit on Friday 30 September afternoon

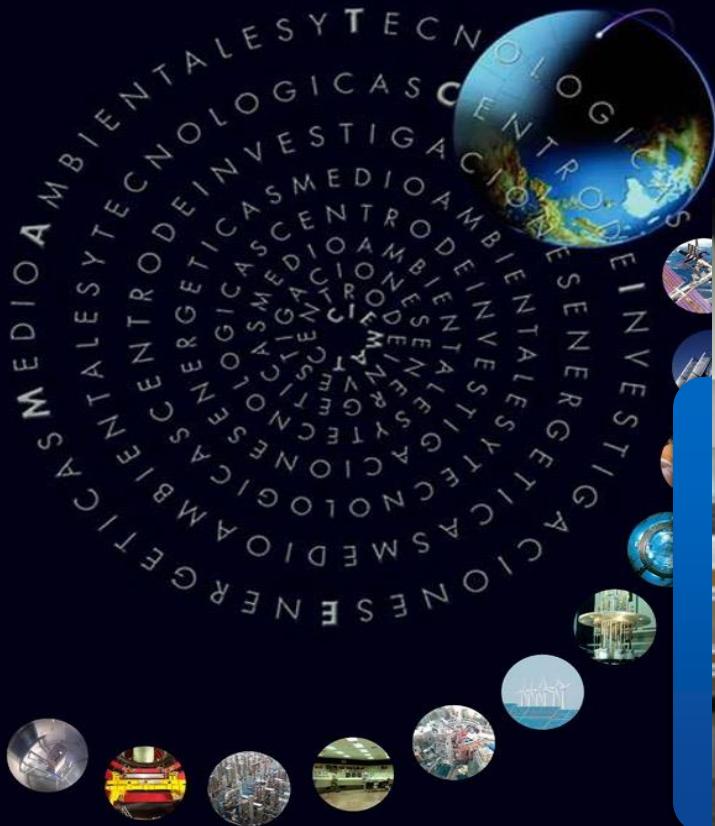
Guide	Group 1 (Fastest)	Group 2 (Complete)	Group 3 (Fast to leave ESRF)	Group 4 (Complete and fast to leave)	Group 5 (No Rush)
	Lee (Beam Dynamics)	Friederike (Diagnostics)	Simone (Beam Dynamics)	Lina (Beam Dynamics)	Elena (Diagnostics)
	12:35 Take away lunch (outside if possible)	12:35 Take away lunch (outside if possible)	12:35 Take away lunch (outside if possible)	12:35 Take away lunch (outside if possible)	12:35 Take away lunch (outside if possible)
	Meeting point 12:50 ESRF entrance hall	Meeting point 12:50 ESRF entrance hall	Meeting point 13:10 ESRF entrance hall	Meeting point 13:10 ESRF entrance hall	Meeting point 13:20 ESRF entrance hall
	12:50 Meet + transfer CTRM	12:50 Meet + transfer To LNCMI (30 mn)	13:10 Meet + transfer CTRM	13:10 Meet + transfer RF	13:20 Meet + transfer To LNCMI (30 mn)
	13:00 CTRM (20 mn + 5 mn. transfer)	13:20 CTRM (20 mn + 5 mn. transfer)	13:20 CTRM (20 mn + 5 mn. transfer)	13:20 SSA (5 mn transfer + 25 mn)	13:50 LNCMI (20 mn)
	13:25 ID32 (5mn transfer+20 mn)	13:50 Back LMC	13:50 ID32 (5mn. transfer+20 mn)	13:50 CTRM (20 mn + 5 mn. transfer)	14:20 Back LMC
	13:50 transfer To LCM1 (30 mn)	14:20 CTRM (20 mn + 5 mn. transfer)	14:20 transfer To LCM1 (30 mn)	14:20 ID32 (5mn. transfer+20 mn)	14:50 CTRM (20 mn + 5 mn. transfer)
	14:20 LNCMI (20 mn)	14:50 ID32 (5mn. transfer+20 mn)	14:50 LNCMI (20 mn)	14:50 transfer To LCM1 (30 mn)	15:20 ID32 (5mn. transfer+20 mn)
	14:40 Free	15:20 SSA (5 mn transfer + 25 mn)	15:50 Free	15:20 LNCMI (20 mn)	15:50 Free to leave ESRF
	15:40	15:50 Free to leave ESRF	16:20	15:50 Free	16:20
	16:10	16:20		16:20	

- 4 places to see
- 5 groups with a dedicated expert guide
- Different duration and starting time to allow some of you to leave earlier
- Write your name on the dedicated boards
- Maximum 20 persons / group
- Wear mask during the visit
- Take good shoes and coat for the transfers

OUR WORKSHOP IS... GREEN

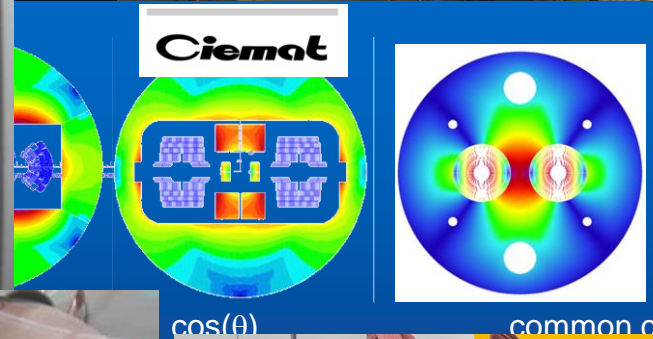
- You got a 2 days tramway ticket, please do not forget to give it back to the organisers if you do not use it.

- Return your badge at the end of the workshop



CIEMAT

Research Center
for Energy, Environment and
Technology



Climate Change



SCIENTIFIC BASE

- ▶ Atmosphere
 - Emissions of pollutants
 - Atmospheric processes
- ▶ Soils and Geology
 - Climate variability
 - Edaphic processes



TRACING MONITORING

- ▶ Atmosphere (GEI's emissions, others indicators)
- ▶ Terrestrial ecosystems (cycle C and N)
- ▶ Soils and Geology: Edaphic characterization
- ▶ Paleoclimate records

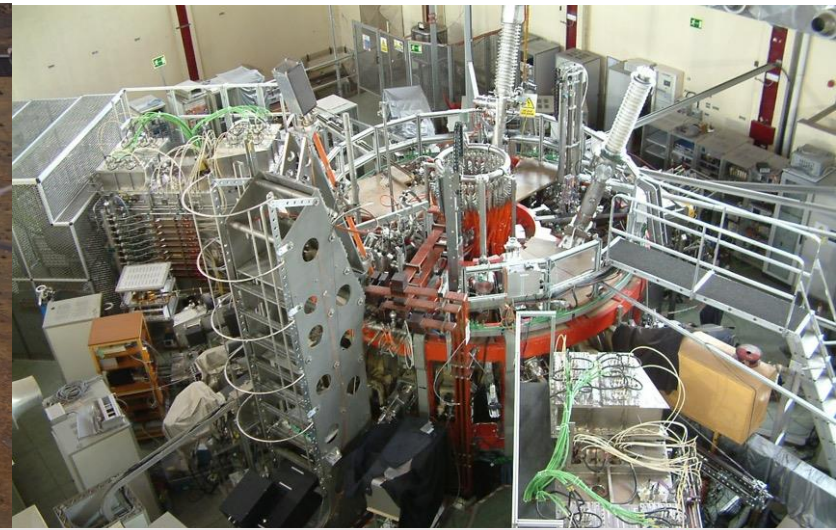
IMPACT

- ▶ Atmosphere: Air quality-feedbacks
- ▶ Ecosystems / Vulnerability
- ▶ Soils
- ▶ Population
- ▶ Social perception

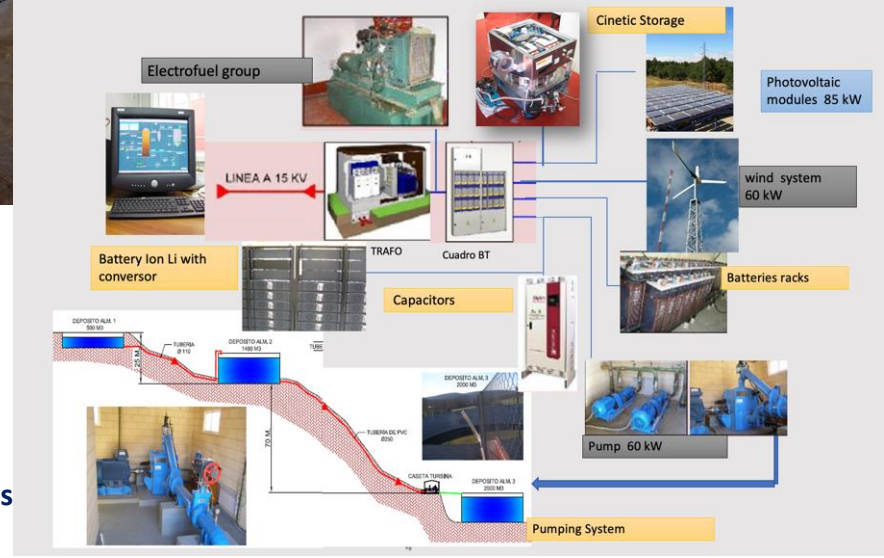
ADAPTATION / MITIGATION

- ▶ Terrestrial ecosystems
- ▶ Environmental technologies (CO₂ capture and storage)
- ▶ Alternative/renewable energies
- ▶ Socio-economic aspects
- ▶ Future scenarios

Looking forward helping to the scope of this Workshop,



Biofuel from waste
Gen & storage
Integrated systems



Looking forward helping to the scope of this Workshop,

We will be delighted to host you to keep on discussing about this critical subject.



7th Workshop on Energy for Sustainable Science at Research Infrastructures.

September (tbc), 2024
Madrid.

