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

Practical Information JL Revol

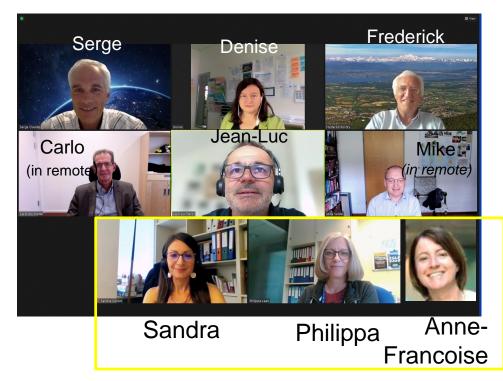
On behalf of the International and Local Organising Committee





WELCOME

Welcome at the ESRF on behalf of the International Organizing Committee and the Local Organizing Committee



Please do not hesitate to contact us and especially Sandra, Philippa and Anne-Francoise in case of needs



6th Workshop Energy for Sustainable Science at Research Infrastructures



Thursday Morning

Plenary session Coffee Break Group Photo Plenary session

Lunch :

Thursday Afternoon

// Session Coffee Break // Session Cocktail and dinner

Friday Morning

Summary // session Plenary session Coffee Break Plenary session

Lunch :

Visit

00.00	/ toron corronni				
10:30	Central building (outside if	weather OK)			
10:55	Central building (outside if	weather OK)	Morning	Afternoon	
11:15	Auditorium	JEUDI 29	Morning	Allemoon	
12:45	Canteen first floor	Matin	Après-midi	Soirée	
		12°	🔩 14°	$ 12^{\circ} $	
		▶ 15 km/h	🔺 15 km/h	🔺 10 km/h	
14:00	in Room MD1-21 (smaller ro	oom) and Aud	litorium (la	arger)	

- 14:00 in Room MD1-21 (smaller room) and Auditorium (larger)
 15:40 Under the awning of ESRF1 (outside)
 16:00 in Room MD1-21 (smaller room) and Auditorium (larger)
 10:00 Deviiller A
- 19:00 Bouillon A

Auditorium

09:00

08:30

10:00

10:30

10:50



12:35 Take away from welcome desk central building

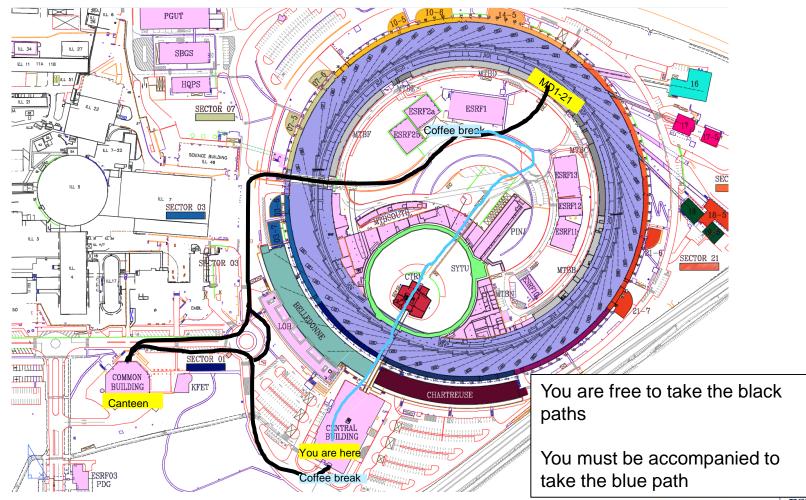
From 12:50 According to the schedule



Nuit

8°
 ¥ 10 km/h

VISUAL MAP TO MOVE ON THE ESRF SITE



This workshop was postponed due to COVID and the IOC is pleased to organize it today in face to face, thanks to the ESRF.

But **<u>COVID is still there</u>** and we have to be prudent:

- Wear face mask
- Regular washing of hands and use of hydrogel

Masks at <u>all times</u> in the auditorium and in the room MD-1-21 except the speaker

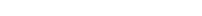
During coffee breaks:

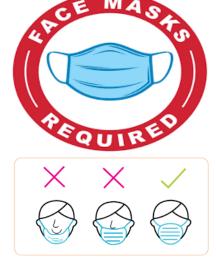
Inside: participants must maintain 1 m distance, and avoid assemblies of more than three people

If possible go outside to take coffee

Avoid all kind of large gatherings

→ Fresh air in any case will be good after a long stay in the auditorium !!!





You can find masks at the entrance of each room and at the welcome desk

The European Synchrotron



COCKTAIL AND DINNER



LE RESTAURANT LE BOUILLON A SERT À LA TABLE LES RECETTES DE NOS MÈRES ET NOS GRANDS MÈRES LES PLUS NOCATOURNABLES, REMISES AU DOUT OU JOUR AVEC AMOUR, SIMPLICITÉ ET GENERDOTE. DE BONS PLATS REVIDORANTS DU ON A FLASIR À DÉQUISTE DITRE AMIS, DI FAMILLE OU EN SCLO, SUPFLACE OU À LA MASON DÉCOUVREZ UN RESTAURAN A BERNDRE LO UDERTE LA POSSIBILITÉ D'APREFÉRET DUE COMME SANET ET GOMMANE. ACCESSEIL F. DI PLIS GRAND



"IT IS A CHALLENGE FOR US TO PROVIDE CONSCIOUS AND REASONED CUISINE ON A LARGE SCALE. A CHALLENGE I WISH TO TAKE UP TO BRING THE SUBJECT OF VIRTUOUS FOOD TO THE GENERAL PUBLIC."

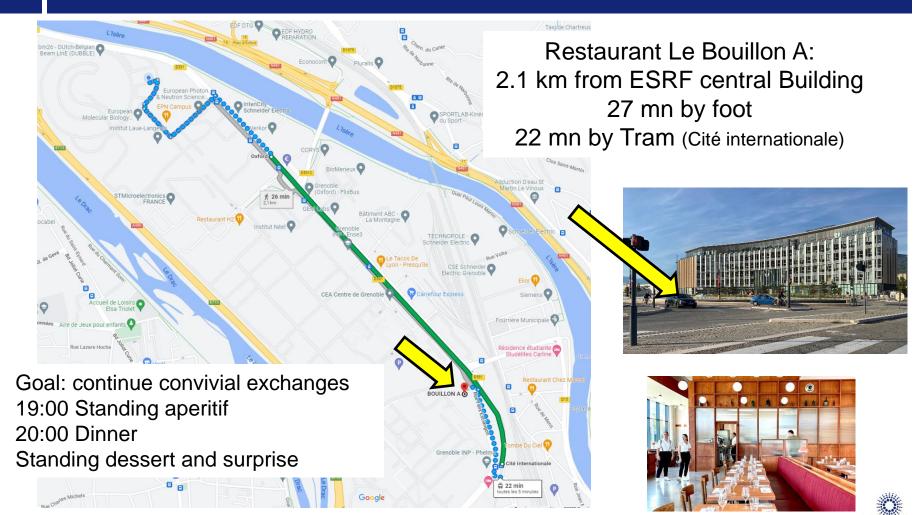
CHRISTOPHER ARIBERT

DO YOU KNOW the HISTORY? BORN IN THE MIDDLE OF THE 19TH CENTURY IN PARIS, BROTHS WERE ORIGINALLY USED FOR HEALTHY DISHES INCLUDING BOILED MEAT AND BROTH... HENCE THE NAME! TODAY, NO MORE MEAT BROTH BUT ALWAYS THE SAME CREDO: BEAUTIFUL, AFFORDABLE AND GOOD!

After three years of activity at his first establishment, Maison Aribert in Uriage, bringing the concept of Bouillon to Grenoble was the logical continuation of Christophe Aribert's commitment to spreading good food to as many people as possible. The name Bouillon A insinuates the mixture of old and new, a style that has become very specific to the chef. "Bouillon" for the vintage side of traditional broths with their popular, warm and affordable atmosphere. On the menu: the great classics of French gastronomy. At the table: families, lovers, businessmen, artists, workers or celebrities... In short, a real jumble of individuals who circulate at any time of the day, from morning to evening, welcomed by an effervescent team . "A" for the signature of Christophe Aribert wishing to capitalize on the existing by injecting his eco-responsible vision, respectful of the living, of natural cycles, of the seasons, of the earth. In the architecture: clean materials, European furniture, artisanal outfits. On the plate: fruits, seasonal vegetables, meat and fish from the region.

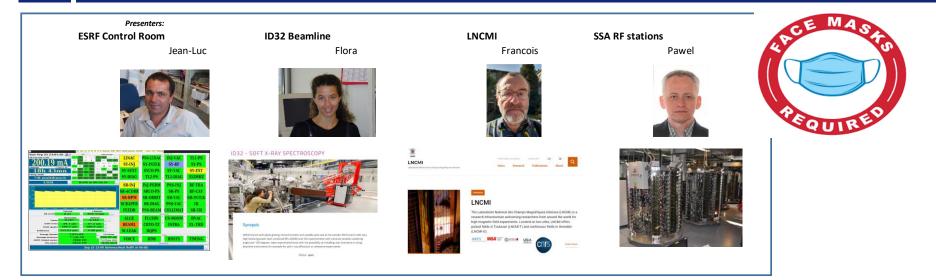


HOW TO GO TO THE RESTAURANT



ESRF

ESRF AND LNCMI VISIT ON FRIDAY AFTERNOON



Visit on Friday 30 September afternoon

	Groupe 1 (Fastest)	Groupe 2 (Complete)	Groupe 3 (Fast to leave ESRF)	Groupe 4 (Complete and fast to l	eave) Groupe 5 (No Rush)	
Guide Lee		Friederike	Simone	Lina	Elena	
	(Beam Dynamics)	(Diagnostics)	(Beam Dynamics)	(Beam Dynamics)	(Diagnostics)	
12:35 1	Take away lunch (outside if possible)	12:35 Take away lunch (outside if possible)				
	Meeting point 12:50	Meeting point 12:50	Meeting point 13:10	Meeting point 13:10	Meeting point 13:20	
ESRF entrance hall		ESRF entrance hall	ESRF entrance hall	ESRF entrance hall	ESRF entrance hall	
12:50 /	Meet + transfer CTRM					
13:00	CTRM (20 mn + 5 mn transfer)	12:50 Meet + transfer To LCMI (30 mn)	13:10 Meet + transfer CTRM	13:10 Meet + transfer RF		
13:25	D32 (5mn transfer+20mn)	13:20 LNCMI (20 mn)	13:20 CTRM (20 mn + 5 mn transfer)	13:20 SSA (5 mn transfer + 25 mn)	13:20 Meet + transfer To LCMI (30 mn)	
13:50 t	transfer To LCMI (30 mn)	13:50 Back LMCI	13:50 ID32 (5mn transfer+20 mn)	13:50 CTRM (20 mn + 5 mn transfer)	13:50 LNCMI (20 mn)	
14:20	NCMI (20 mn)	14:20 CTRM (20 mn + 5 mn transfer)	14:20 transfer To LCMI (30 mn)	14:20 ID32 (5mn transfer+20 mn)	14:20 Back LMCI	
14:40 F	Free	14:50 ID32 (5mn transfer+20 mn)	14:50 LNCMI (20 mn)	14:50 transfer To LCMI (30 mn)	14:50 CTRM (20 mn + 5 mn transfer)	
15:10		15:20 SSA (5 mn transfer + 25 mn)	15:20 Free	15:20 LNCMI (20 mn)	15:20 ID32 (5mn transfer+20 mn)	
15:40		15:50 Free to leave ESRF	15:50	15:50 Free	15:50 Free to leave ESRF	
16:10		16:20	16:20	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

	Plenary Session
	Room: ESRF Auditorium
	Convener: F. Bordry, CERN
09:00	Welcome – F. Sette, ESRF Director General
09:10	Introduction – F. Bordry, CERN
09:20	Practical information – JL. Revol, ESRF
09:30	Climate change is accelerating. We need to move much faster – M. Jarraud, World Meteorological Organization
10:00	Energy Transition: towards a complex cyber-physical system of systems – L. Saludjian, RTE
10.30	Coffee break & Photo – ESRF Central Building Entrance Hall
11:15	Electrical Flexibility Market - B. Remenyi & C. Gaunand, Energy Pool
11:45	Energy management at Stanford University - L. Bleveans, Stanford University
12:15	ERLs and Sustainability – A. Hutton, Jefferson Lab
12:45	Lunch - onsite restaurant

	Parallel Session Energy efficient technologies	Parallel Session Energy management at research infrastructures
	Room: MD-1-21	Room: ESRF Auditorium
	Convener: D. Voelker, DESY	Convener: JL. Revol, ESRF
14:00	Challenges of a megawatt CW class solid state power amplifier for the SPS at CERN – E. Montesinos, CERN	An overview of the status of energy sustainability at the European Spallation Source (ESS) – M. Eshraqi, ESS
14:25	Progress with permanent magnets and return on experience – J. Chavanne, ESRF	Energy optimisations implemented at accelerators and infrastructures at PSI – D. Reinhard, PSI
14.50	Free Air cooling solution for the Data Centers – L. Roy, CERN	Energy management at High Magnetic Field Facilities – F. Debray, CNRS Grenoble
15:15	Energy management University Darmstadt – C. Ripp	ESRF EBS energy management – C. Nevo, ESRF

- The full programme is available on the workshop website including the practical information
- You should be able to connect via the WIFI password given to each of you or via eduroam
- The programme is readable at the entrance of the auditorium

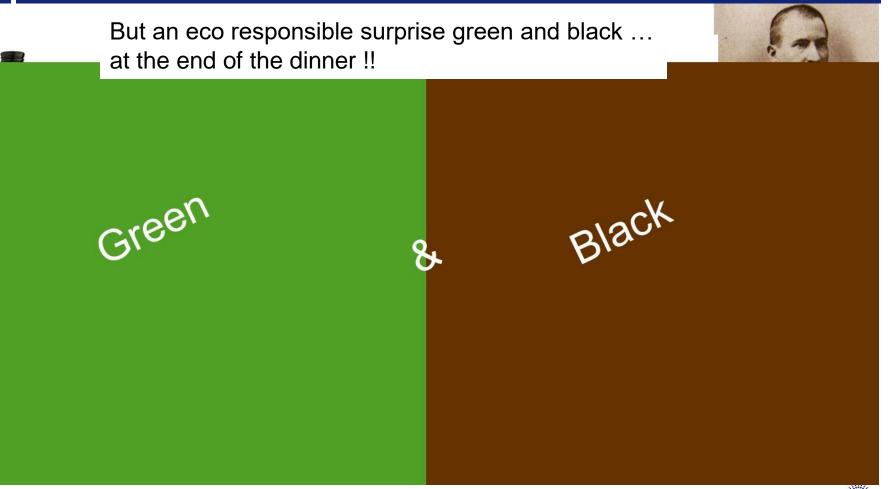
15.40			
	Parallel Session How will projects deal with energy and sustainability		Parallel Session Energy management at research infrastructures and materials
	Room: MD-1-21		Room: ESRF Auditorium
	Convener: M. Eshraqi, ESS		Convener: S. Claudet, CERN
16:00	Sustainability at Fermilab and the PIP-II Project – T. Price, Fermi National Accelerator Laboratory		A big science facility as a living-lab for energy transition: the LNCMI use case – F. Wurtz, G2ELAB-CNRS-UGA
16:25	Sustainability studies for Linear Colliders – S. Stapnes, CERN		ISO 50001 Energy management – N. <u>Bellegarde</u> / S. <u>Claudet</u> , CERN
16.50	Investigating energy futures: The KITTEN test facility for sustainable research infrastructures – G. De Carne, KIT		Water, reduction in consumption and treatment of effluents from cooling towers – S. Deleval, CERN
17:15	Sustainable accelerator R&D in the UK – B. Shepherd		Rare earth and Life cycle management – D. Voelker, DESY
17.40	Closeout		Superconducting alternative magnets – L. Rossi, INFN
18.05	Closeout		Closeout
19:00	Workshop Cocktail & Dinner, 'Bouillon A	(' ге	staurant, Grenoble

	Room: ESRF Auditorium – ESRF Central Building
	Convener: F. Bordry, CERN
08:30	Summary: Energy efficient technologies - D. Voelker, DESY
08:45	Summary: How will projects deal with energy and sustainability? - M. Eshraqi, ESS
09:00	Summary: Energy management at research infrastructures – JL. Revol, ESRF
09:15	Summary: Energy management at research infrastructures and materials - S. Claudet, CERN
09:30	Summary: Energy management for the Future Circular Collider (FCC) – JP. Burnet, European Organisation for Nuclear Research
10:00	Efforts to save Energy consumption in KEK accelerator facilities – T. Koseki, KEK
10.30	
10:50	Advanced energy concepts and energy efficiency - HJ. Eckoldt, DESY
11:20	Transmutation of Nuclear Waste with Accelerator-driven Systems – M. Bourquin, Genova University
11:50	EBS: A New Light for Science - first scientific highlights - M. Krisch, ESRF
12:20	Closing remarks and next workshop - JL. Revol, ESRF & JM. Perez, CIEMAT
12:35	Take-away lunch
13:30	Facility tours (optional): ESRF, LNCMI
16:00	End of workshop



- You get a 2 days tramway ticket, please do not forget to give it back to the organisers if you do not use it.
- You will get cardboard glass during coffee break, please re-use it also if you want to get water during the session
- Big water glass bottle will be available during the workshop
- Documentation on the ESRF is available at the back of the auditorium, please do not hesitate to take it... but it is also available on the ESRF website
- Return your badge at the end of the workshop







We wish you a nice and fruitful workshop









6th Workshop Energy for Sustainable Science

at Research Infrastructures

