

PROGRAMME

6TH WORKSHOP ON ENERGY FOR SUSTAINABLE SCIENCE AT RESEARCH INFRASTRUCTURES

Organized by CERN/ESS/DESY/PSI/ERF. Hosted by ESRF.

THURSDAY, 29 SEPTEMBER 2022

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																
	<table border="1"> <thead> <tr> <th>Parallel Session Energy efficient technologies</th> <th>Parallel Session Energy management at research infrastructures</th> </tr> </thead> <tbody> <tr> <td>Room: MD-1-21</td> <td>Room: ESRF Auditorium</td> </tr> <tr> <td>Convener: D. Voelker, DESY</td> <td>Convener: JL. Revol, ESRF</td> </tr> <tr> <td>14:00</td> <td>Challenges of a megawatt CW class solid state power amplifier for the SPS at CERN – E. Montesinos, CERN</td> </tr> <tr> <td>14:25</td> <td>Progress with permanent magnets and return on experience – J. Chavanne, ESRF</td> </tr> <tr> <td>14.50</td> <td>Free Air cooling solution for the Data Centers – L. Roy, CERN</td> </tr> <tr> <td>15:15</td> <td>Energy management University Darmstadt – C. Ripp</td> </tr> <tr> <td></td> <td>ESRF EBS energy management – C. Nevo, ESRF</td> </tr> </tbody> </table>	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	14:25	Progress with permanent magnets and return on experience – J. Chavanne, ESRF	14.50	Free Air cooling solution for the Data Centers – L. Roy, CERN	15:15	Energy management University Darmstadt – C. Ripp		ESRF EBS energy management – C. Nevo, ESRF
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	An overview of the status of energy sustainability at the European Spallation Source (ESS) – M. Eshraqi, ESS																
	Energy optimisations implemented at accelerators and infrastructures at PSI – D. Reinhard, PSI																
	Energy management at High Magnetic Field Facilities – F. Debray, CNRS Grenoble																
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15.40	Coffee break – ESRF01	
	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. Bellegarde / S. Claudet, 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' restaurant, Grenoble	

FRIDAY, 30 SEPTEMBER 2022

Plenary Session	
	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	Coffee break - Auditorium
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