



Joint EPS–SIF International School on Energy

6th Course:
Energy Innovation and
Integration for a Clean
Environment

19-24 July 2021

Directors:
L. Cifarelli
F. Romanelli

In order to contribute to the training of young scientists working in the energy sector or intending to do so, the **European (EPS) and the Italian (SIF) Physical Societies** started as a collaborative initiative the

Joint EPS–SIF International School on Energy

The courses were foreseen to take place on a **biennial basis** in the beautiful venue of Villa Monastero in Varenna, Lake Como, Italy

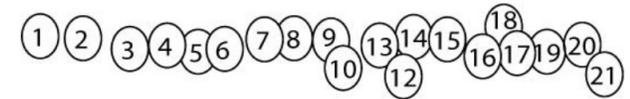
The school was born during **LC** mandate as EPS president (2011–2013) as a consequence of fruitful discussions with **Friedrich Wagner**, past EPS president and then chair of the **EPS Energy Group**

→ LC & FW co-Directors of the school

At the time LC was also SIF president and this is why the venue of **Villa Monastero** was chosen

The villa had also previously hosted in 2007 a meeting of the **EPS Energy Group** that was the preamble to the publication by SIF in 2008 of a white book concerning the Italian scenario:

ENERGY IN ITALY: PROBLEMS AND PERSPECTIVES (1990–2020)



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1) Gaudenzio Mariotti
2) Jurgis Vilemas
3) Giuseppe Franco Bassani
4) Martin Keilhacker
5) Jose Antonio Tagle
6) Enzo De Sanctis
7) Jan Vaagen
8) Hartwig Freiesleben

9) Per-Anker Lindgård
10) John Twidell
11) Carlos Varandas
12) Renato Angelo Ricci
13) Jean Louis Bobin
14) Jan Mlynar
15) Juhani Keinonen

16) Sener Oktik
17) Friedrich Wagner
18) Thomas Hamacher
19) Thomas Lehmann
20) Sven Kullander
21) Luisa Cifarelli
22) Barbara Alzani

The primary goal of the school is to present **all physics fields with relevance for the technologies of energy production, conversion, transmission and savings**, thus addressing today's most relevant energy issues

The **potential** of the various technologies has to be presented together with the need for continuous **R&D** to fully unfold them

This is why at the school a vast portfolio of **basic lectures** and **topical seminars** has to be foreseen by specialists in their field

The unique feature of the school actually lies in its **multidisciplinarity** and **interdisciplinarity**, including basic and applied topics but also **climate** and **economical aspects**

- The **1st Course** was held in summer of 2012 on “*New Strategies for Energy Generation, Conversion and Storage*”
- The **2nd Course** in 2014 was devoted to an overview of “*Basic Concepts and Forefront Ideas on Energy*”, covering the major scientific areas
- The **3rd Course** was exceptionally held in 2016 at the Ettore Majorana Foundation and Centre for Scientific Culture, in Erice, Italy, in collaboration with the Materials Research Society and EMRS, on “*Materials for Energy and Sustainability*”
- The **4th Course** was organized in 2017 back in Varenna, with the focus on “*Advances in Basic Energy Issues*”
- In 2019 the **5th Course** titled “*Energy: Where We Stand and Where We Go*” was successfully held and matched the primary goal of the school to present all research and development fields in energy matters

In the garden of Villa Monastero ...



- The current **6th Course** in 2021 targets “Energy Innovation and Integration for a Clean Environment”

LC & **Francesco Romanelli** co-Directors of the school

SCIENTIFIC COMMITTEE

Angela Bracco - Università di Milano (Italy)

Luisa Cifarelli - Università di Bologna (Italy)

Jozef Ongena - Ecole Royale Militaire, Brussels (Belgium)

Francesco Romanelli - Università di Roma Tor Vergata (Italy)

Petra Rudolf - University of Groningen (The Netherlands)

Friedrich Wagner - Max-Planck-Institut für Plasmaphysik, Greifswald (Germany)

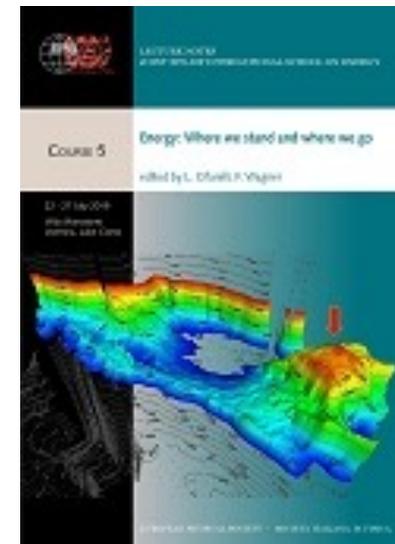
For each of its courses the school gathered **50 to 60 participants** – lecturers, observers and students – of many different nations

The lectures were typically delivered by about **20 experts** in various fields

The proceedings of the school, published as **Lecture Notes**, conserve the teaching material presented and make it available to those who did not attend the school

→ **Series of volumes published by SIF**

→ **Online open-access provided by EPS in The European Physical Journal Web of Conferences (EPJ WoC)**



We really hope that learned societies will continue to fulfill their mission, providing an appropriate and knowledgeable scientific input concerning the issue of **clean and sustainable energy production**

→ Despite the tremendous COVID times we are affording, this remains **a challenge of paramount importance for our future generations**

Enjoy the school !