

Brainstorming Workshop

Transporting Tens of Gigawatts of Green Power to the Market

Institute for Advanced Sustainability Studies e.V.

Kleist-Villa, Berliner Str. 130, D-14667 Potsdam, Germany

Presentations will be approximately of 30 min each, followed by discussion

Thursday, May 12th, morning session

09:00 Registration

09:30 Welcome and introduction

Carlo Rubbia, Nobel Laureate, Scientific Director IASS

09:50 The Exceptional Properties of Superconductivity in Cuprates

Alex Müller, Nobel Laureate, Physics Institute, University of Zurich

10:30 Can future energy needs be met through more integrated infrastructures?

Nebosja Nakicenovic, Vienna University of Technology & IIASA

11:15 *Coffee break*

11:30 Bringing electric energy from the desert

Toufik Hasni, President of APEQUE, Algeria

12:15 The Garwin-Matisoo Vision after 45 Years – Electric Power via

Superconducting Cables: Economic and Environment Issues

Paul M. Grant, W2AGZ Technologies

13:00 *Lunch*

Thursday, May 12th, afternoon session

14:00 Status of conventional HVDC electricity transport at the GW level

Jochen Kreusel, Asea Brown Boveri Ltd (ABB)

14:45 Superconducting DC Cables for High Power Transport over Long Distances

Steven W. Eckroad, Electric Power Research Institute (EPRI)

15:30 The Pipetron as an engineering model for 10 GW electricity transmission over

1,000 km

Lance D. Cooley, Fermi National Accelerator Laboratory

16:15 *Coffee break*

- 16:30 Superconductivity at DESY
Peter Schmüser, Deutsches Elektronen-Synchrotron & University of Hamburg
- 17:15 Superconductivity and Cryogenics at CERN
Serge Claudet, European Organization for Nuclear Research (CERN)
- 18:00 Innovative solutions for bulk power transmission
Peter Menke, Siemens Energy Sector
- 19:00 *Dinner hosted by IASS*

Friday, May 13th, morning session

- 10:00 The Superconducting Power Technology in China
Liye Xiao, Institute of Electrical Engineering, Chinese Academy of Sciences
- 10:45 Classical and High Temperature Superconductors: Practical Applications and Perspectives at CERN
Amalia Ballarino, European Organization for Nuclear Research (CERN)
- 11:30 *Coffee break*
- 11:45 The new MgB₂ superconductors: present status and future perspectives
Giovanni Grasso, Columbus Superconductors
- 12:30 High-capacity high temperature superconducting power cables
Jean-Maxime Saugrain, Nexans
- 13:15 Experiment of the 200-meter DC superconducting power cable and perspectives of DC superconducting power transmission and distribution
Satarou Yamaguchi, Chubu University
- 14:00 *Lunch*

Friday, May 13th, afternoon session

- 15:00 Round table discussion on superconducting versus conventional HVDC lines
- 16:00 Summary and conclusions
- 17:00 End of workshop