

Accommodation

Hotels near City Center:

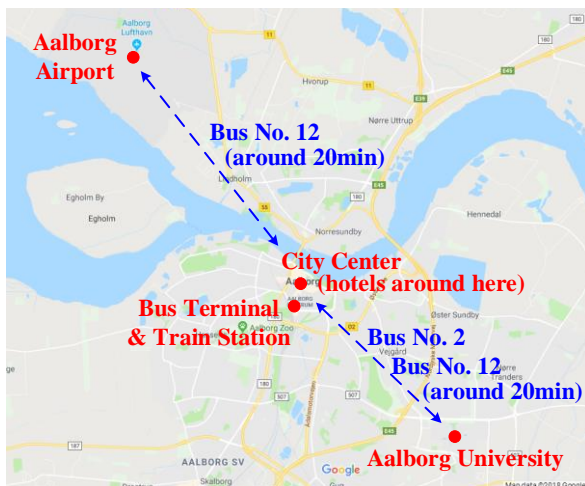
Radisson BLU Limfjord, Phønix Hotel, Cablnn Hotel, First Hotel, Comwell Hvide Hus, etc.

Hotel near Aalborg University:

Scandic Aalborg Øst

More information can be found at **Visit Aalborg:**

<https://www.visitaalborg.com/In-int/danmark/hotels/hotels-aalborg>



Bus Information:

Bus No. 2 to AAU Kroghstræde, then walk 1 minute to Fibigerstræde 15.

Bus No. 12 to Halldor Laxness vej, then walk 6 minutes to Fibigerstræde 15.

Cash in DKK only on buses.

Taxi Information:

Dantaxi 4x48, Tel: +45 98101010

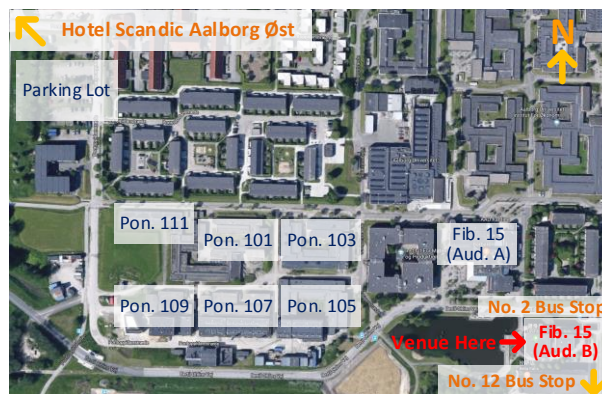
Organization

Organizer IEEE PELS TC1 Power & Control Core Technologies
Department of Energy Technology
Aalborg University

Chairmen Prof. Xiongfei Wang
Aalborg University, Denmark
Dr. Łukasz Kocewiak
Ørsted, Denmark

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Venue Auditorium B, Fibigerstræde 15
Department of Energy Technology
Aalborg University, Denmark



WIFI AAU-1-DAY
Password: **tux68mite**

Lunch Lunch will be served onsite



IEEE Workshop on Representations of Power Electronics for Grid Dynamic Studies

5 December, 2018
Aalborg University, Denmark



Representations of Power Electronics for Grid Dynamic Studies

It is our pleasure to invite you to the Workshop on Representations of Power Electronics for Grid Dynamic Studies, to be held in Aalborg, Denmark, on 5 December 2018. The workshop is sponsored by the IEEE Power Electronics Society (PELS).

Power electronics devices have been widely used with renewable power generation, energy-efficient power transmission, distribution and consumption. The full controllability of power electronics devices enables to modernize the electric power grid with more flexibility, yet it also poses new challenges to the dynamic operations of power systems.

This workshop intends to bring together the power electronics and power system engineers to share the recent research and industry practices on the modeling and dynamic studies of power electronic based power systems. There will be a number of invited presentations given by the leading experts from both the industry and academia, and a panel discussion on the challenges for dynamics and control of the future 100% converter-based power systems.

All presentations and discussions in the workshop will be in English, and the workshop registration is free of charge.

We look forward to meeting you in Aalborg.

Xiongfei Wang, Aalborg University, Denmark

Łukasz Kocewiak, Ørsted, Denmark

Programme

08:00	Registration
08:30	Welcome and Opening Frede Blaabjerg, IEEE PELS President-Elect Aalborg University, Denmark
08:35	Harmonic Stability in Power Electronic based Power Systems Xiongfei Wang, Aalborg University, Denmark
09:00	Small-signal Stability Studies in Offshore Wind Power Plants Łukasz Kocewiak, Ørsted, Denmark
09:30	System Modelling for Offshore Wind Power Plants within TenneT Christoph Buchhagen, TenneT, Germany
10:00	Grid Impacts and Technical Challenges for the Bulk Power System Integrating with Large Renewable Energy Yongning Chi, China EPRI, China
10:30	Coffee Break
11:00	Energinet's Experience for the Power Electronics Converter Related Transient Studies Jun Bum Kwon, Energinet, Denmark
11:30	A Practical Sub-synchronous Oscillation in an Offshore Wind Power Plant: Modelling, Eigenvalue-based Analysis Approach and Validation Lei Shuai, Siemens Gamesa, Denmark
12:00	Impedance Based Analysis of Interconnected Power Electronics Systems: the Impedance Operator and Partition Points Marta Molinas, NTNU, Norway

12:30	Lunch & AAU Lab Tour
13:30	Grid-forming Power Electronics Systems: Control Implementation and Stability Challenges Lennart Harnefors, ABB/KTH, Sweden
14:00	Modeling and Simulation of Complex Converters Min Luo, Plexim, Switzerland
14:30	Impact of VSC on Power System Voltage Small-Signal Stability Yin Sun, DNV GL Energy, the Netherlands
15:00	Coffee Break
15:30	Online Measurement and PHIL Emulation of Power System Impedance to Test Adaptively Controlled Inverters Tuomas Messo, Tampere University, Finland
16:00	Challenges in Real-time Simulation of Power Electronics Enabled Power Systems Adrien Genic, Typhoon HIL, USA
16:30	Panel Discussion: Challenges on Dynamic Analysis of 100% Converter-Based Power Systems
17:30	End of Workshop