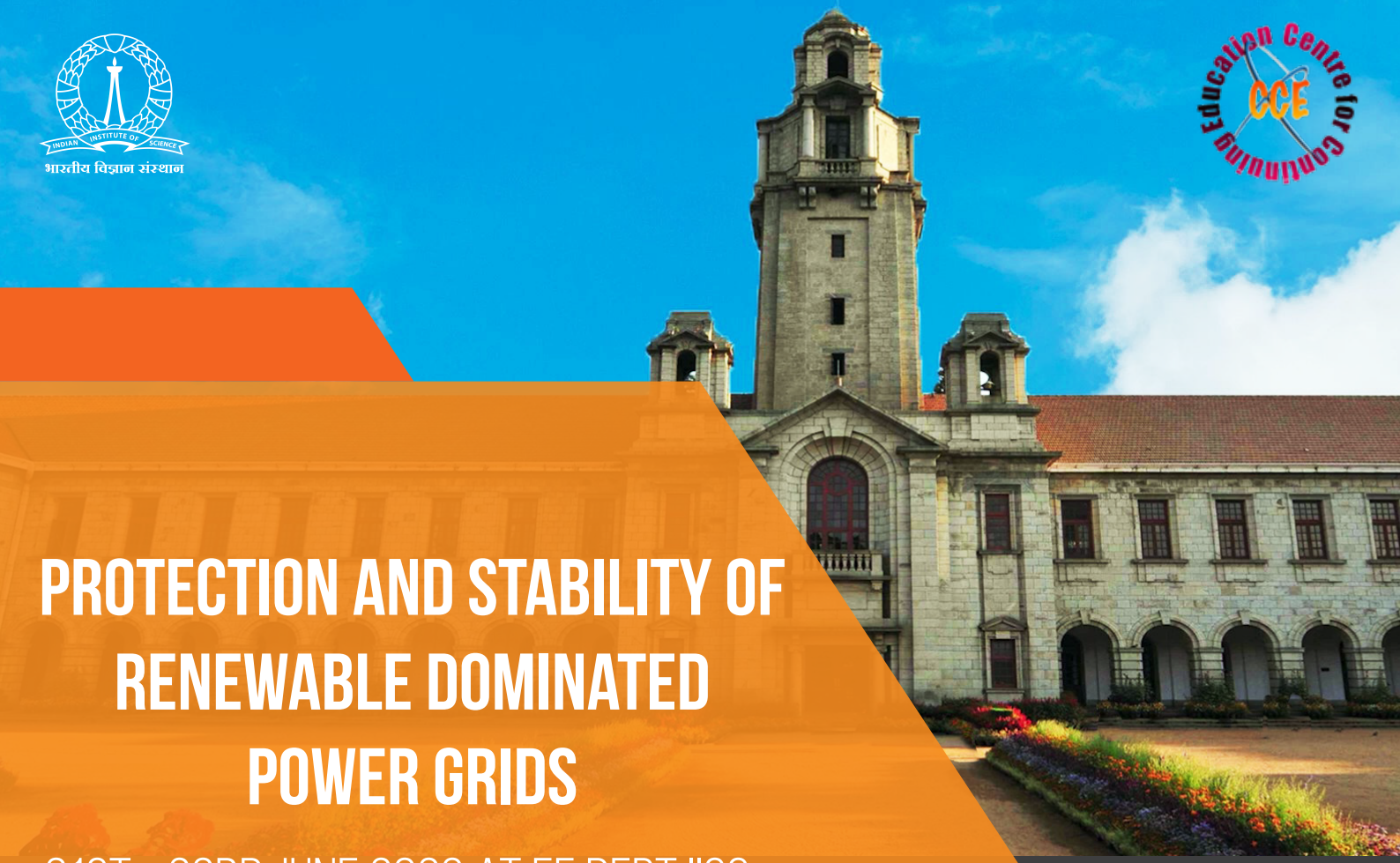

PROTECTION AND STABILITY OF RENEWABLE DOMINATED POWER GRIDS

21ST - 23RD JUNE 2023 AT EE DEPT IISC

Speakers:

Prof. Sukumar Brahma, Clemson University, USA
Prof. Prasad Enjeti, Texas A&M University, USA
Prof. Kaushik Basu, IISc
Prof. Gurunath Gurrala, IISc
Prof. Vishnu Mahadeva Iyer,IISc
Prof. Sarasij Das, IISc
Prof. Samir Hazra, IISc
Dr. Utsab Kundu,IISc

Objective

Inverter-based resource technologies are rapidly replacing synchronous ac rotating machinery in electrical power grids all over the world. Power electronic converters are used for interfacing these renewables with the grid. This introduces multiple technical challenges to the power systems. The objective of this workshop is to discuss various stability and protection aspects of grid integration of renewables. Also, 6 hours of hands-on training will be provided on simulations of grid following inverters.

Topics Covered

Overview of Photovoltaic and Wind Generations; Converter Controls for Renewables; Grid Connection Requirements; Impact of Renewables on Fault Analysis and Protection; Impact of Renewables on System Stability; AC Microgrids; DC Microgrids; Hands on Training (6 hours) on Renewable Modelling in PSCAD and MATLAB.

Who will benefit from the course?

This workshop is intended for students, researchers, faculty from academic and technical institutions, staff from private and government industries.

Registration Fee:
Student/Project Assistants/
Post-Docs: INR 5000+18% GST
Faculty of College/University: INR 8000+18% GST
Industry: INR 15000+18% GST

This course can be attended only by registration. Limited accommodations available at IISc on first come first serve basis against payment.

Registration Deadline: 30th May 2023

Registration link

https://iisc.online/shortterm/home.html