



DIPARTIMENTO DI INGEGNERIA DELL'ENERGIA ELETTRICA  
E DELL'INFORMAZIONE "GUGLIELMO MARCONI"

University of Bologna - School of Architecture and Engineering

**29 June, 2016 – 3:00 PM – Room 5.4**

Seminar

# High-Frequency Phenomena on the Boundary of Power and EMC/Control Engineering

Akihiro Ametani

**Outline** - This seminar is focused on high frequency transients originating in power system facilities and resulting into a reliability problem for power system operation.

The significance of electromagnetic disturbances due to lightning strikes and switching operations is presented using field experiences in Japanese utilities for ten years.

Existing approaches for studying high-frequency transients are explained and demonstrated. Finally, limitations in existing simulation methods are discussed, and paths for simulation and analysis of high frequency phenomena in power systems are discussed.



**The Speaker - Akihiro Ametani** (IEEE Fellow 1992, Life Fellow 2009) received the Ph.D. degree from the University of Manchester (UMIST), Manchester, U.K., in 1973. He was with UMIST from 1971 to 1974, and with Bonneville Power Administration for summers from 1976 to 1981, and developed electromagnetic transients program. Since 1985, he has been a Professor at Doshisha University, Kyoto, Japan. In 1988, he was a Visiting Professor at the Catholic University of Leuven, Belgium. From April 1996 to March 1998, he was the Director of the Science and Engineering Institute, Doshisha University, the Dean of the Library and Computer/Information Center from

April 1998 to March 2001 and was the Chairperson of the Doshisha Council until March 2014. He was the vice President of the IEE Japan. Since April 2014, Dr. Ametani is an Emeritus Professor at Doshisha University, and is an Invited Professor at Ecole Polytechnique Montreal, Montreal, Canada.

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