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**Date** March 14, 2019  
**Location** ELH 114 / EPFL, CH-1015, Lausanne  
**Time** 11.00 – 12.00h

## **Testing of Power Converters at the end of The Production Line Using the Virtual Load Concept with Common Mode Active Filtering Features**

### Abstract

**The presentation focuses on a power hardware-in-the-loop platform for the testing, at the end of the production line, of power converters for variable speed electrical drives. For this purpose, the converter under test does not supply a real electrical machine but another power electric converter acting as a load emulator that regenerates the power into the grid. The testing platform is intended to emulate all necessary tests needed to stress the converter under test for different operating conditions to detect early failures. Experimental results are presented for the testing of the 150 kVA power converter at the end of the production line using a transformerless configuration that requires particular control features to avoid zero-sequence currents. The testing platform is operational at the end of a production line with more than 10,000 tested units working worldwide.**

### Biography

Iustin Radu Bojoi (SM'10, F'19) received the MSc degree in Electrical Engineering from Technical University of Iasi, Romania, in 1993, and the PhD in Electrical Engineering from Politecnico di Torino, Italy, in 2002. He is a Full Professor of Power electronics and Electrical Drives in the Energy Department "G. Ferraris" and Chairman of the Power Electronics Innovation Center at Politecnico di Torino, Italy.

Dr. Bojoi published more than 150 papers covering electrical drives and power electronics for industrial applications, transportation electrification, power quality, and home appliances. He was involved in many research projects with industry for direct technology transfer aiming at obtaining new products. Dr. Bojoi is the co-recipient of 5 prize paper awards, the last one in 2015 as IEEE-IAS Prize Paper Award. Dr. Bojoi is an Associate Editor of the IEEE Transactions on Industrial Electronics and Chair of the Electrical Machines Technical Committee of the Industrial Electronics Society.

The lecture is open to the public. The event takes place within the scope of the Swiss Chapter of IEEE Power Electronics Society, <https://www.ieee.ch/chapters/pel/>

