PLECS WORKSHOP

Real-Time Simulation Using the PLECS RT Box
Plexim GmbH, June 20, 2018

08:30	**Registration and Installation of Necessary Features**
09:00	**Overview and Introduction to RT Box Workflow using PLECS** ▶❙ PLECS overview ▶❙ Ideal switch concept ▶❙ From PLECS offline models to RCP and HIL ▶❙ Code Generation
09:30	**RT Box Introductory Exercise** ▶❙ PLECS RT Box features Exercise: Introductory exercise using I/O ports
10:00	**RT Box Specs and Library Blocks**
10:15	**Break**
10:30	**Real-time Simulation of a Voltage Source Inverter (VSI)** ▶❙ PLECS model creation using the target blocks library ▶❙ Deployment on the RT Box Exercise: Voltage Source Inverter (VSI)
12:00	**Lunch**
13:00	**Timing Overview and Step Size Selection** ▶❙ Example of a Buck Converter using continuous, switched implementation ▶❙ Step size and calculation time ▶❙ Motivation for sub-cycle averaging using PWM capture module ▶❙ Example of a Buck Converter with sub-cycle averaged configuration
13:45	**Model Optimization** ▶❙ Sub-cycle averaging and power modules ▶❙ Model separation Exercise: Model splitting using a DTC example
15:00	**Break**
15:15	**Virtual Prototyping** ▶❙ Concept of virtual prototyping ▶❙ Extension of VSI with controls Exercise: Virtual prototyping
16:00	**Q&A - End of Workshop**
Contact	**Plexim GmbH, +41 44 533 51 00, info@plexim.com**
Location	**Plexim GmbH, 3rd Floor, Zeppelin Wing, Technoparkstrasse 1, 8005 Zurich, Switzerland**
Note	**This workshop addresses to anyone who already has experience with the simulation software PLECS.**