PLECS WORKSHOP

Advanced Modeling and Simulation of Power Electronic Systems Day 1
University of Southern Denmark, October 6, 2015

08:30	Registration
09:00	Introduction to PLECS ▶| General use of PLECS Blockset and PLECS Standalone ▶| Instantaneous switching ▶| Variable and fixed-step operation Exercise: Modeling a switched-mode power supply
10:00	Break
10:30	Solver Settings ▶| Definition of stiff and non-stiff systems ▶| Explicit and non-explicit solvers ▶| Stability domains ▶| Accuracy considerations, step size control ▶| Proper handling of discontinuities, zero-crossing detection Exercise: Solver accuracy and settings
12:00	Break
13:00	Introduction to Thermal, Mechanical & Magnetic Modeling & Simulation ▶| Switching & conduction loss descriptions ▶| Combined electrical-thermal simulation ▶| Permeance Capacitance Analogy Model Exercise: Thermal modeling of a buck converter
14:00	Lunch
15:00	Overview of PLECS Tools and Q&A ▶| AC Sweep and Impulse Response Analysis Tools ▶| Steady State Analysis Tool ▶| Implementing custom components Exercise: Creating a custom PV string component
16:00	End of day
Contact	Plexim GmbH, +41 44 533 51 00, info@plexim.com
Location	University of Southern Denmark, Room 2.0.08 at Cortex Park, Campusvej 55, 5230 Odense, Denmark

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