MONDAY 08:30 – 12:30

Radiative Wireless Power Transfer Basics and Implementation

SM02
EuMC

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Room: Juliana 4

This short course consists of three basic parts, presented in four lectures. The first one covers the history and the basics of WPT with an emphasis on radiative WPT, i.e for applications to be powered on multiple meters distance from a source. The second part zooms in on the subsystems that make up a radiative WPT receiver. These subsystems are the antenna, the rectifier and impedance matching networks. Attention will be paid to designing these subsystems using free available software, like Octave, QucsStudio and OpenEMS as well as design formulas provided during the short course. In the last part, we will go through an assignment, using the mentioned freeware. At the end of the short course, the student should be capable of designing his/her own low-power radiative Wireless Power Transfer receiver.

PROGRAMME

Radiative Wireless Power Transfer Basics and Implementation, Part 1: History and Basics

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Radiative Wireless Power Transfer Basics and Implementation, Part 2: Subsystems A

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Radiative Wireless Power Transfer Basics and Implementation, Part 2: Subsystems B

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Radiative Wireless Power Transfer Basics and Implementation, Part 3: Example

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