

## Bachelor-/Seminar-/Masterarbeit



# Automated Construction of Equivalent Electrical Circuit Models based on FEM Simulations

#### **Motivation:**

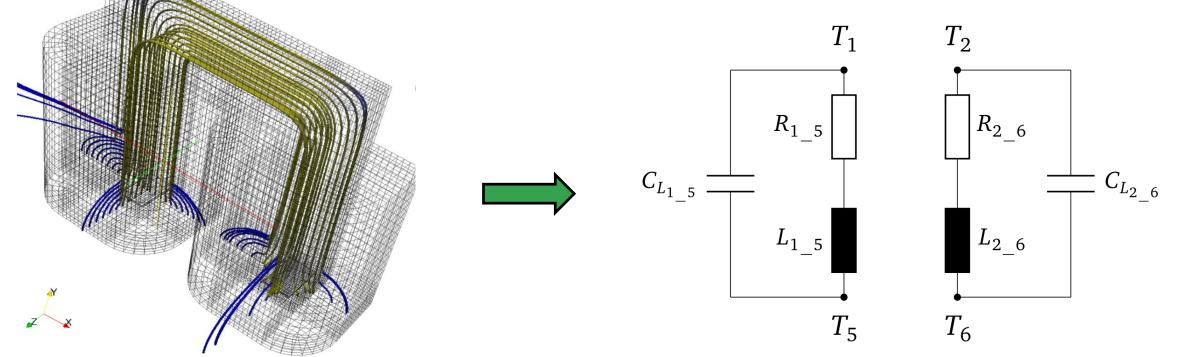
The description of electromagnetic components and systems by electrical circuit models is indispensable for a wide range of applications, especially in the field of Electromagnetic Compatibility (EMC).

#### Tasks:

- Literature search
- Development of a physical based model order reduction method directly resulting in an electric network
- Implementation, test and application

### **Objective:**

- 3D electromagnetic field simulation using the Finite-Element (FE) method
- Lear about basic concepts of model order reduction techniques



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