

Master-IT: Project Work WS 2010 / 2011

Topic: Identification Methods for State Monitoring of Permanent Magnet Synchronous Motor

Area: Pattern Recognition / Sensor Fusion

- Start: September 2010
- Partner: granted Research Project

- Tool: Matlab/Simulink
- Prerequisites: Programming know-how in Matlab's m-language, mathematical know-how

Description:

Aim of this project work is the participation in an R&D of a deterministic method for diagnosis of a permanent magnet synchronous motor (PMSM) including all necessary processing elements. The tear-and-wear effects of the PMSM and its structural processes shall be monitored. For detection, only voltage and current signals of the power electronics are taken into account for sensing mechanical process parameters. All involved pattern recognition algorithms shall be developed and implemented with the respect to resource limitations on electronic drives.

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