Vorstellung der Forschergruppe “Control of renewable energy systems (CRES)”

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17.02.2016

Treffen mit Bachmann electronic GmbH,
Technische Universität München

Gliederung

1 Vorstellung der Forschergruppe “Control of Renewable Energy Systems (CRES)”

Gliederung

1. Vorstellung der Forschergruppe “Control of Renewable Energy Systems (CRES)”
   - CRES Team
   - Herangehensweise
   - Interdisziplinäre Expertise
   - Forschungsblickwinkel und Publikationen
   - Laboraufbau

Gliederung

Vorstellung

CRES Team

CRES Team

H. Eldeeb, M.Sc.
(CRES/EAL,09/2015)

C. Dirscherl, M.Sc.
(CRES,01/2014)

C. Hackl, Dr.-Ing.
(CRES,01/2014)

J. Kullick, M.Sc.
(CRES,10/2015)

K. Schechner, M.Sc.
(CRES,01/2014)

Z. Zhang, M.Sc.
(CRES/EAL,07/2015))

Externe Doktoranden bzw. Kollaborationen

S. Krüner, M.Sc.
(SINN Power GmbH)

F. Bauer, M.Sc.
(EAL)

M. Abdelrahem,
M.Sc. (EAL)

Vorstellung

Tätigkeitsfelder

Klassische Windkraftanlagen

Ziel: Erhöhen der Zuverlässigkeit

Flugwindkraftanlagen

Ziel: Fehlertolerante Regelung

Kleinwindkraftanlagen

Ziel: Einsatz von RSM ($\leqslant$ 50 kW)

Wellenkraftwerke (mit SINN Power GmbH)

Ziel: Energieeffiziente und robuste Regelung

Geothermieanlagen

Ziel: Fehlertolerante Regelung

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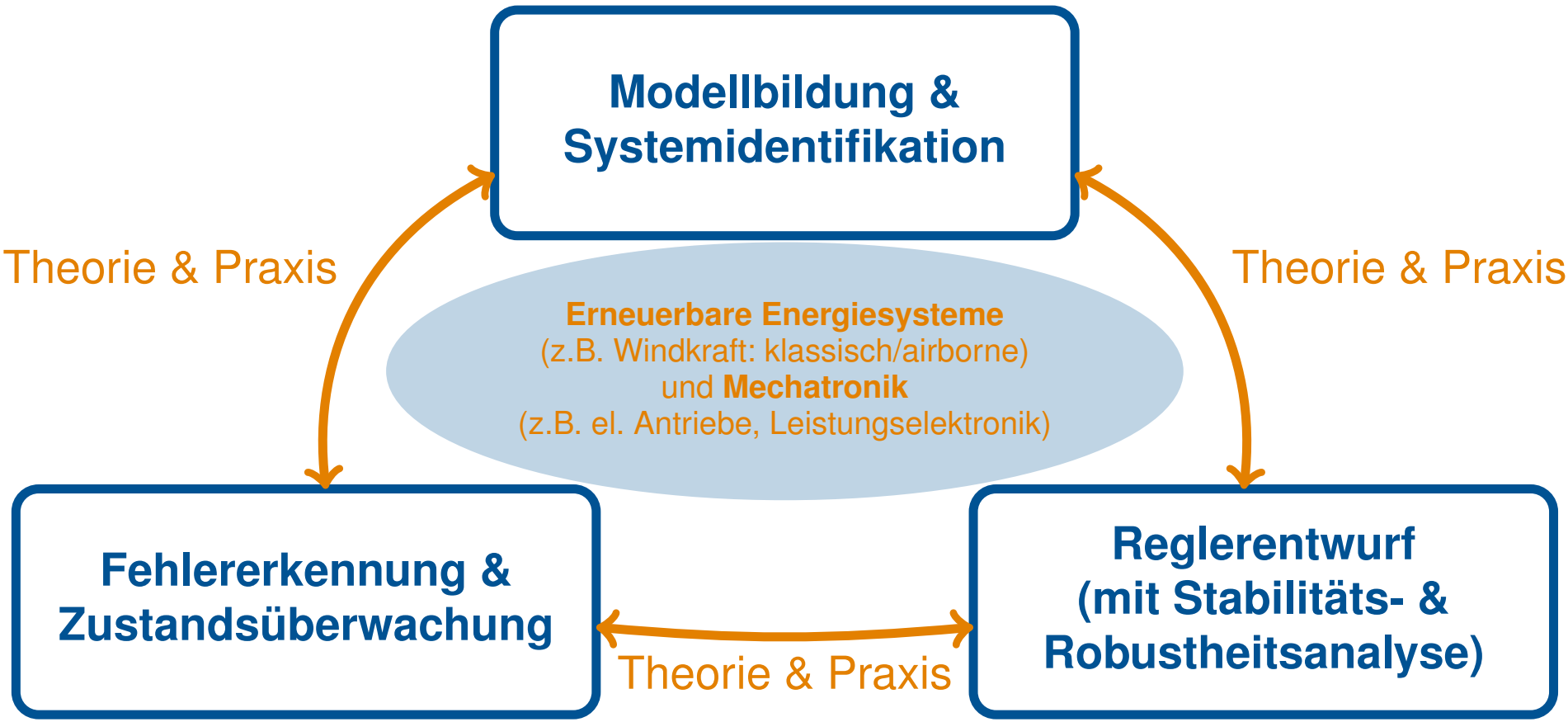
Vorstellung

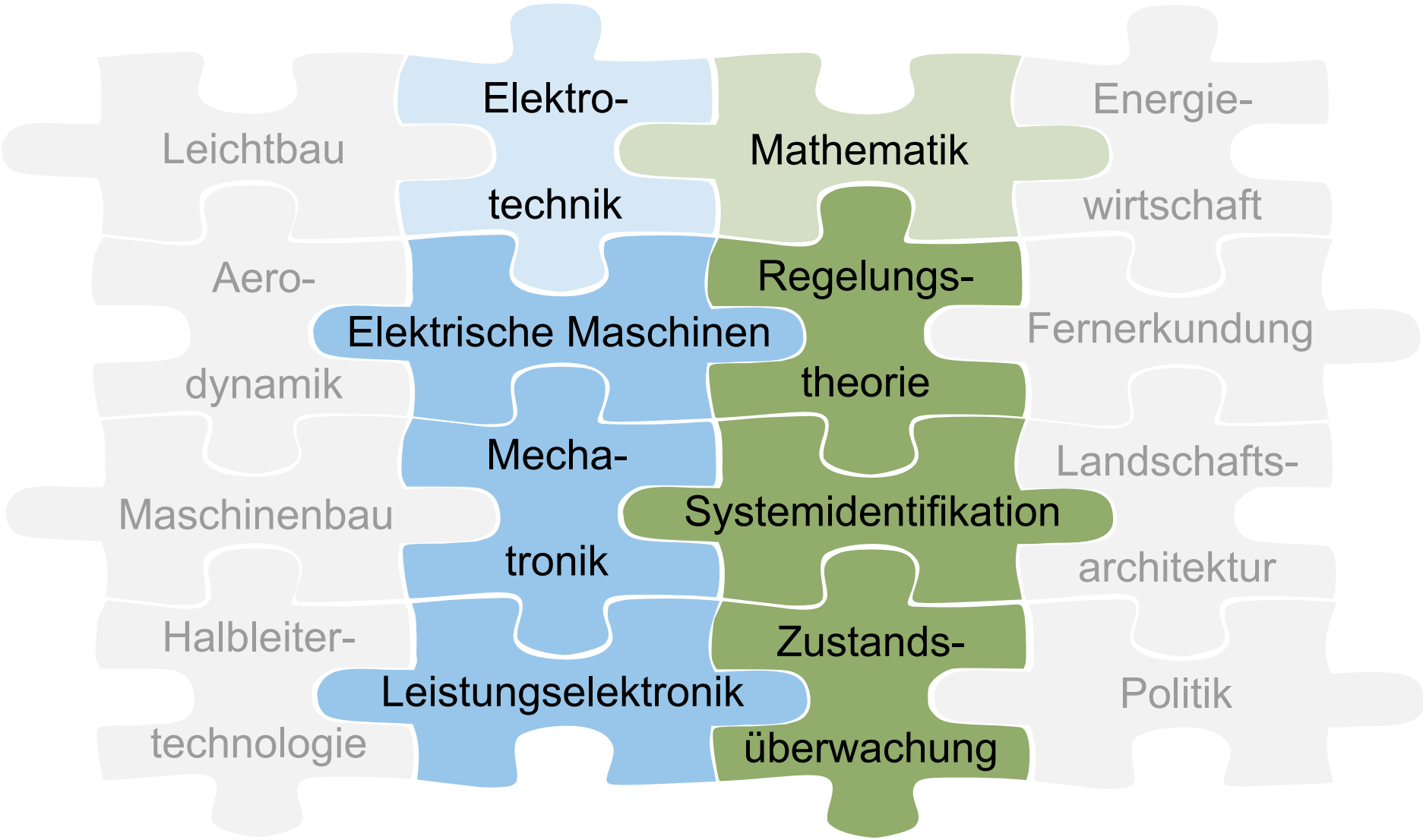
Herangehensweise



Gliederung

Vorstellung

Interdisziplinäre Expertise



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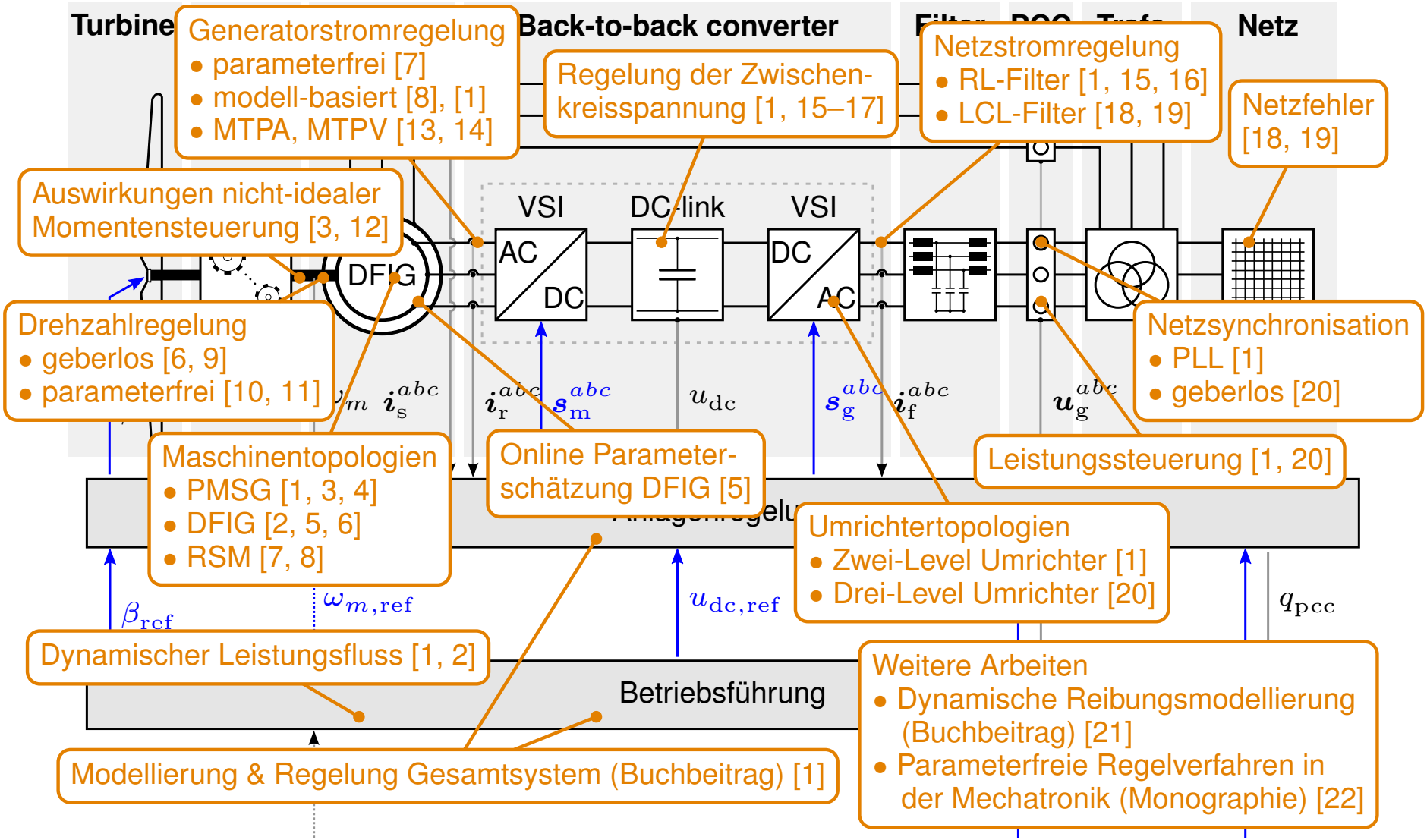
Vorstellung

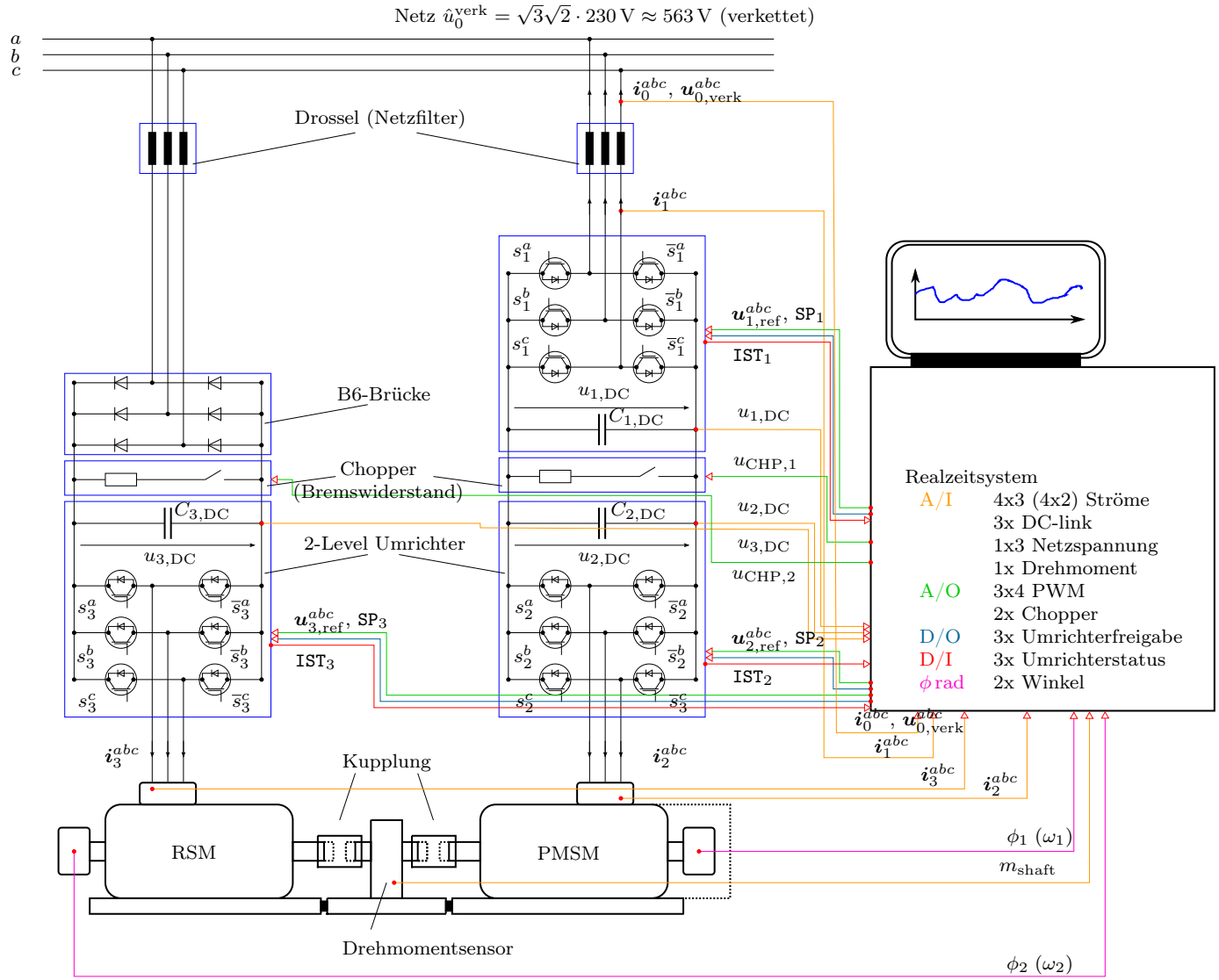
Forschungsblickwinkel und Publikationen



Gliederung

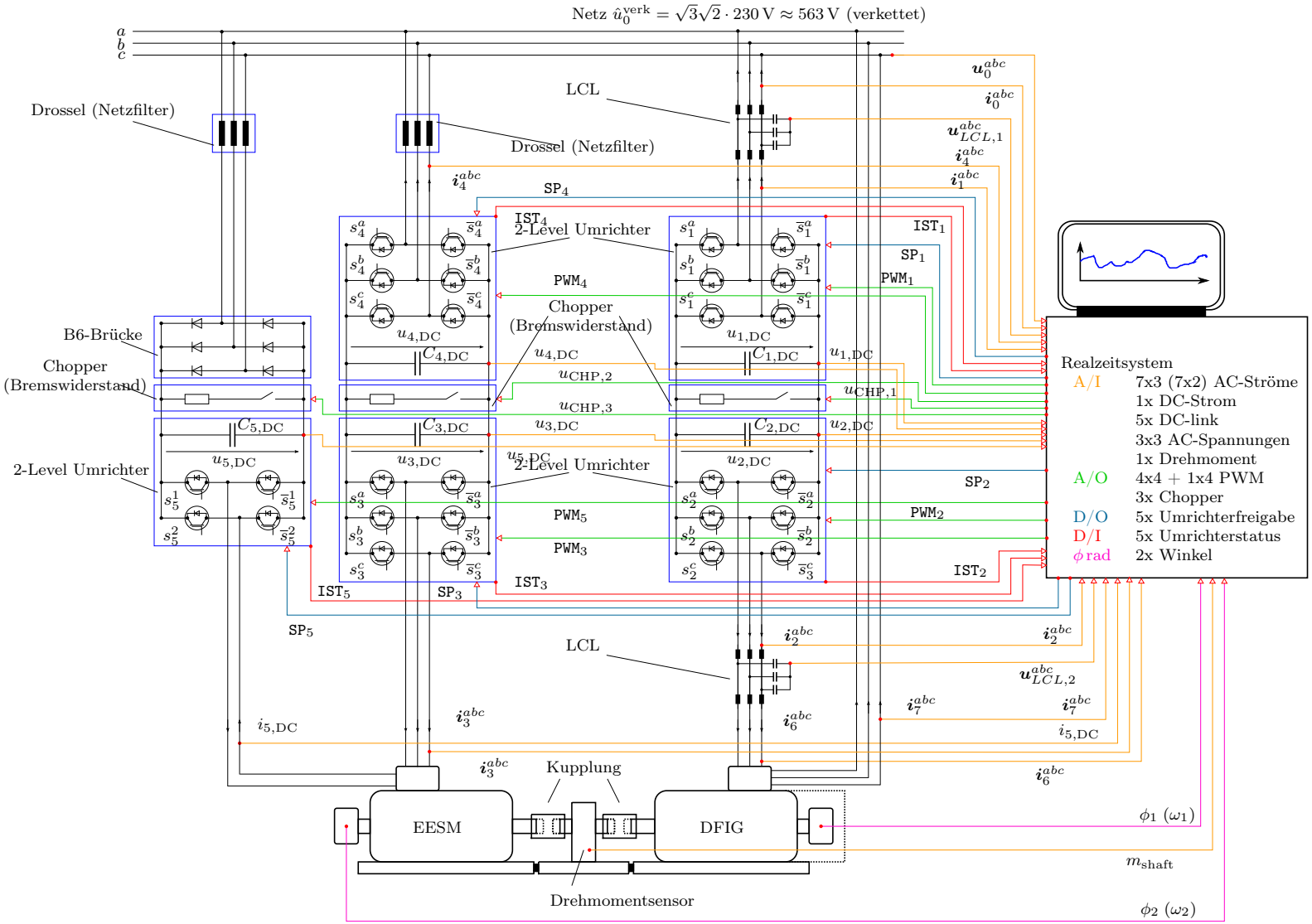
Vorstellung

Laboraufbau 1: Reluktanz-Synchronmaschine und Permanentmagnet-Synchronmaschine



Vorstellung

Laboraufbau 2: Fremd-erregte Synchronmaschine und doppelt-gespeiste Asynchronmaschine



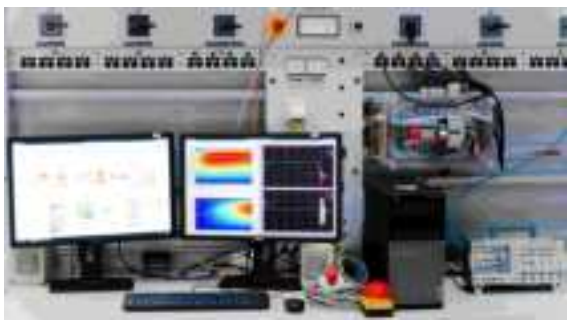
Vorstellung

Laboraufbau (aktueller Stand)

Reluktanz- und Permanentmagnet-Synchronmaschine

Realzeitsystem und Umrichter

Host PC und Sicherheitsbox



Doppelt-gespeiste ASM

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