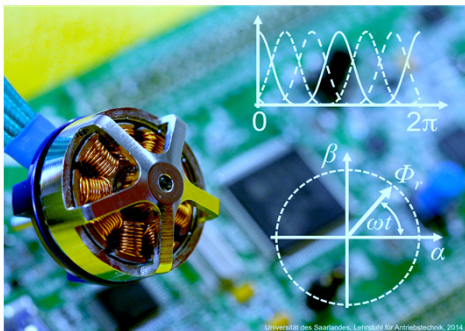# Motor as a Sensor
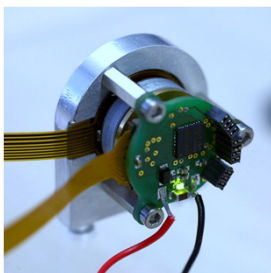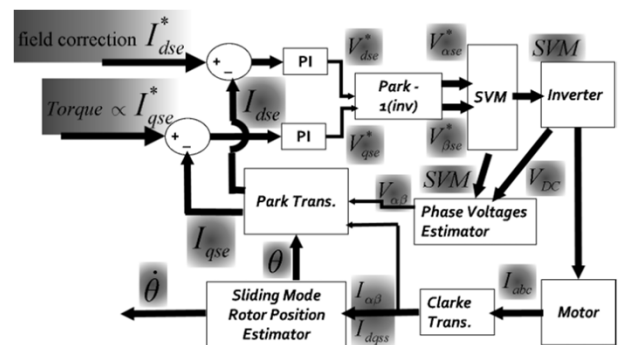## Integrated online condition monitoring for reliable and quality-efficient production



**Analysis of Electrical Devices based on Sensorless Techniques**

- Online measurement of the drive status through modern techniques based on HFCI and FRIC technology
- Condition monitoring and inspection achievable without the need of sensors



**Robust Control and Estimation for Industrial Environments**

- Robust control and estimation of electrical driver by means of Sliding Mode / H_infinity controllers and observers for reliable operation in industrial environments
- Analysis of the tradeoff between performance and robustness



**Integration and Connectivity in relation to Industry 4.0**

- Implementation on integrated and embedded drive systems
- Communication within an Industry 4.0 Network based on standard protocols

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