

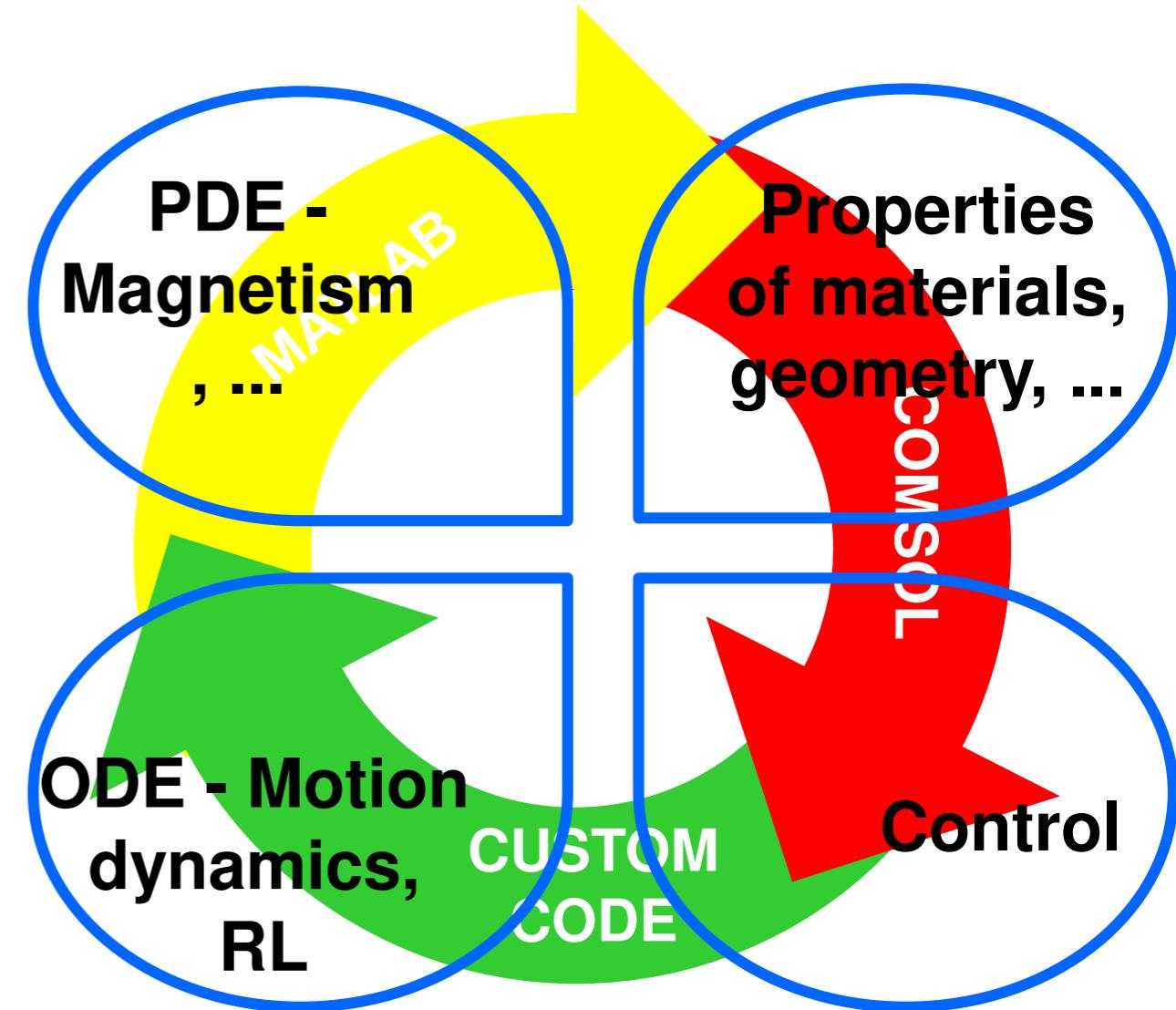
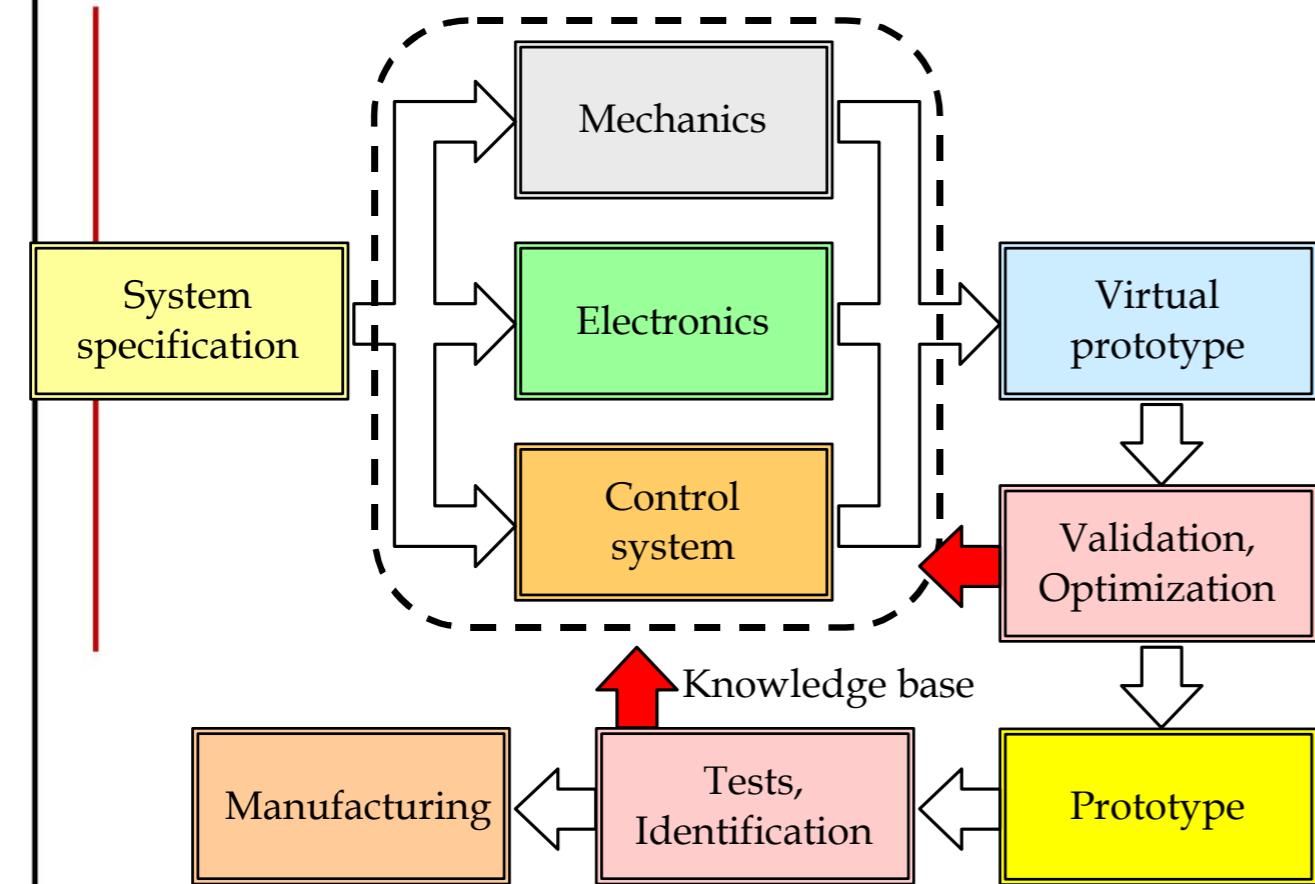


AKADEMIA GÓRNICZO-HUTNICZA  
IM. STANISŁAWA STASZICA W KRAKOWIE  
AGH UNIVERSITY OF KRAKOW

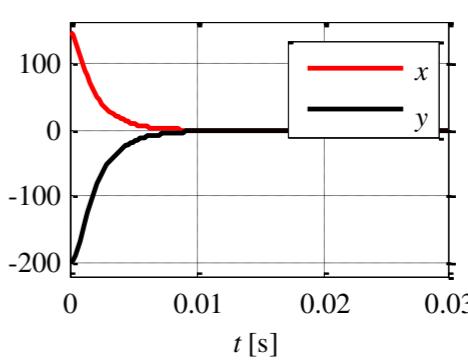
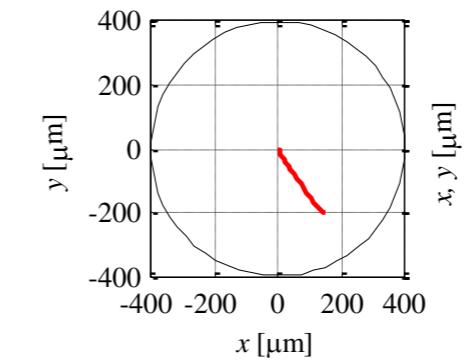
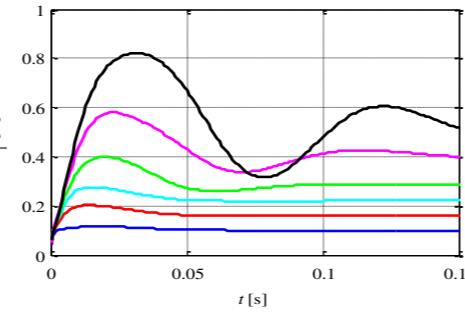
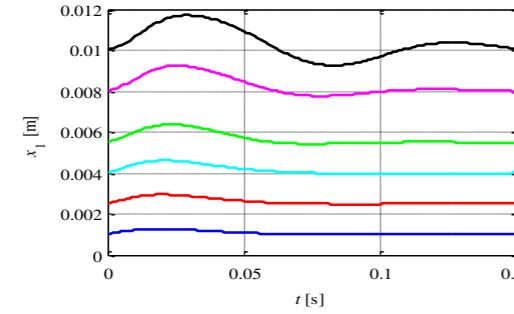
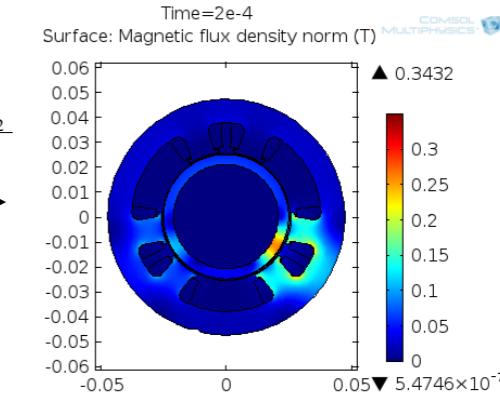
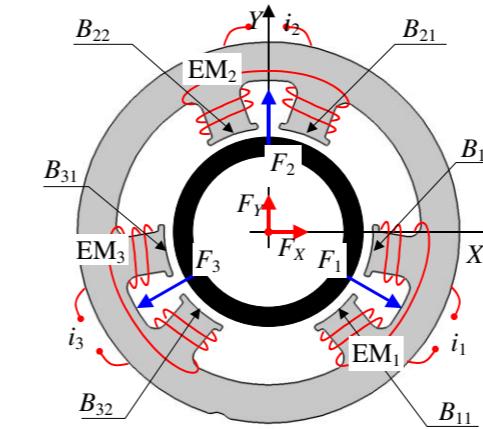
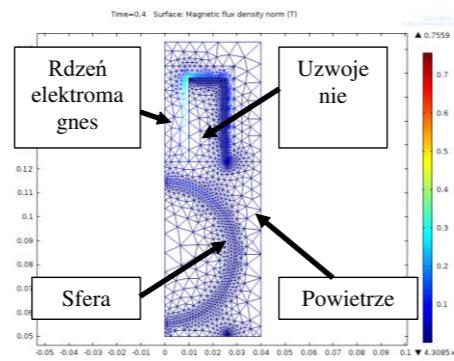
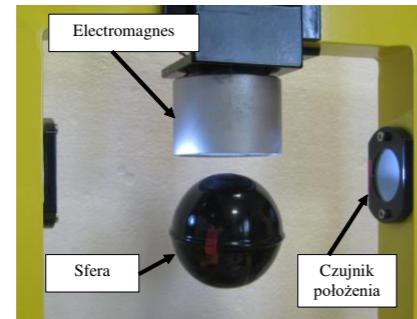
Department of Automatic Control and Robotics

# Active Magnetic Levitation Active Magnetic Bearing

# From concept to prototype

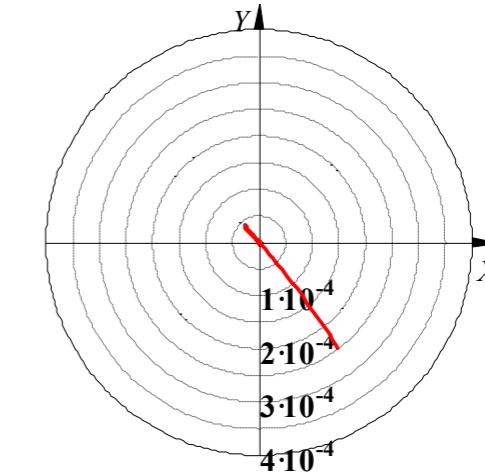
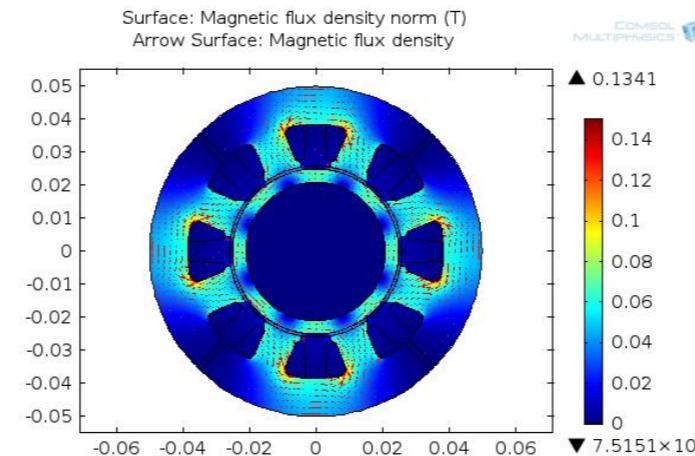
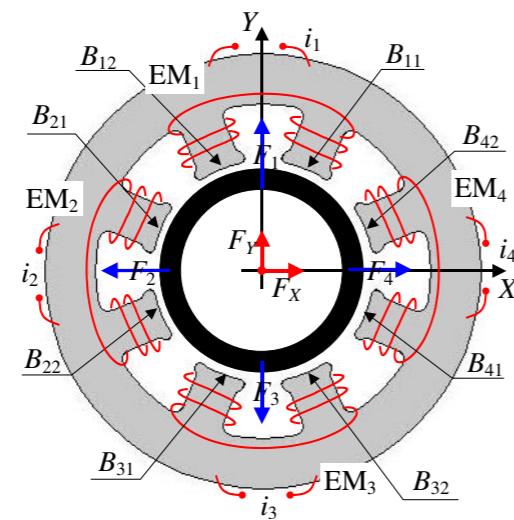
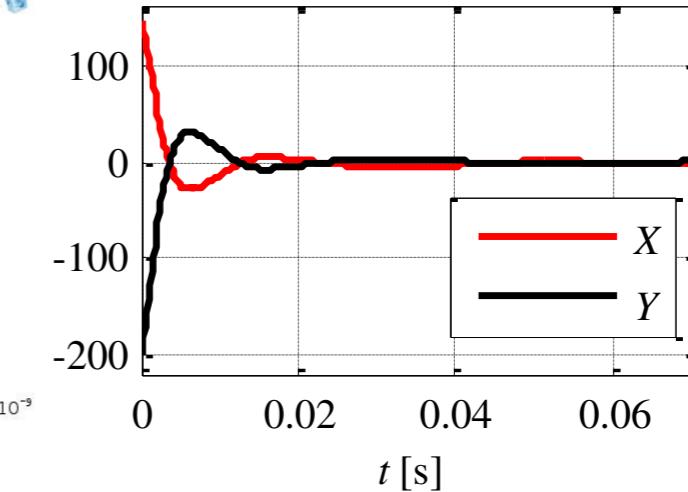
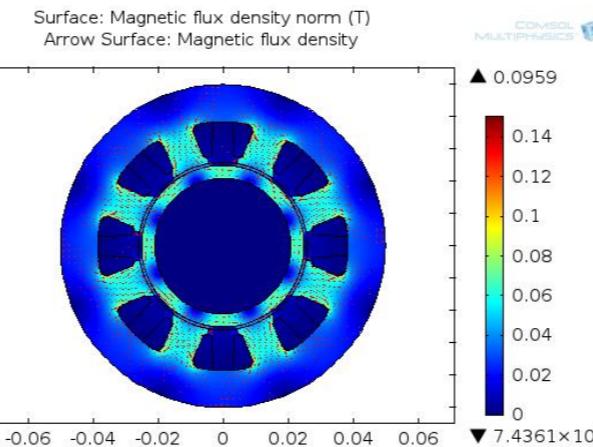
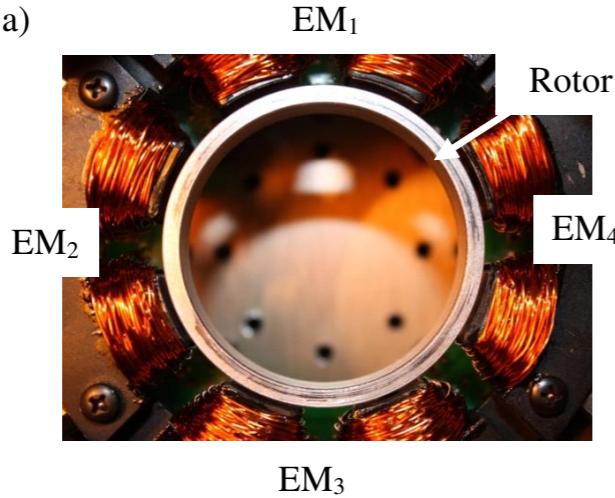


# Virtual prototypes – suspension and bearing



# Virtual prototypes – suspension and bearing

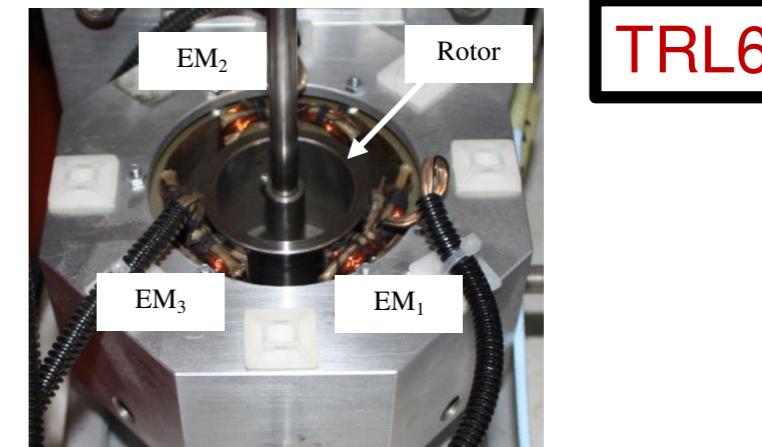
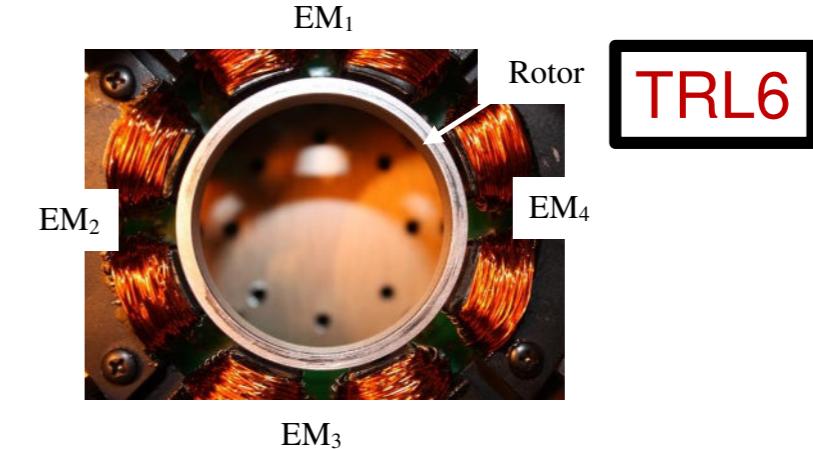
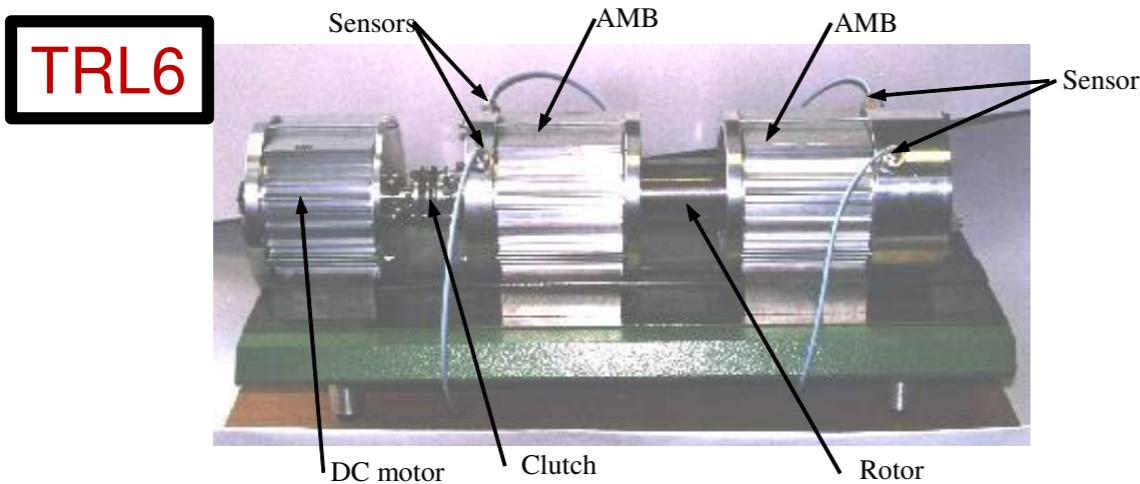
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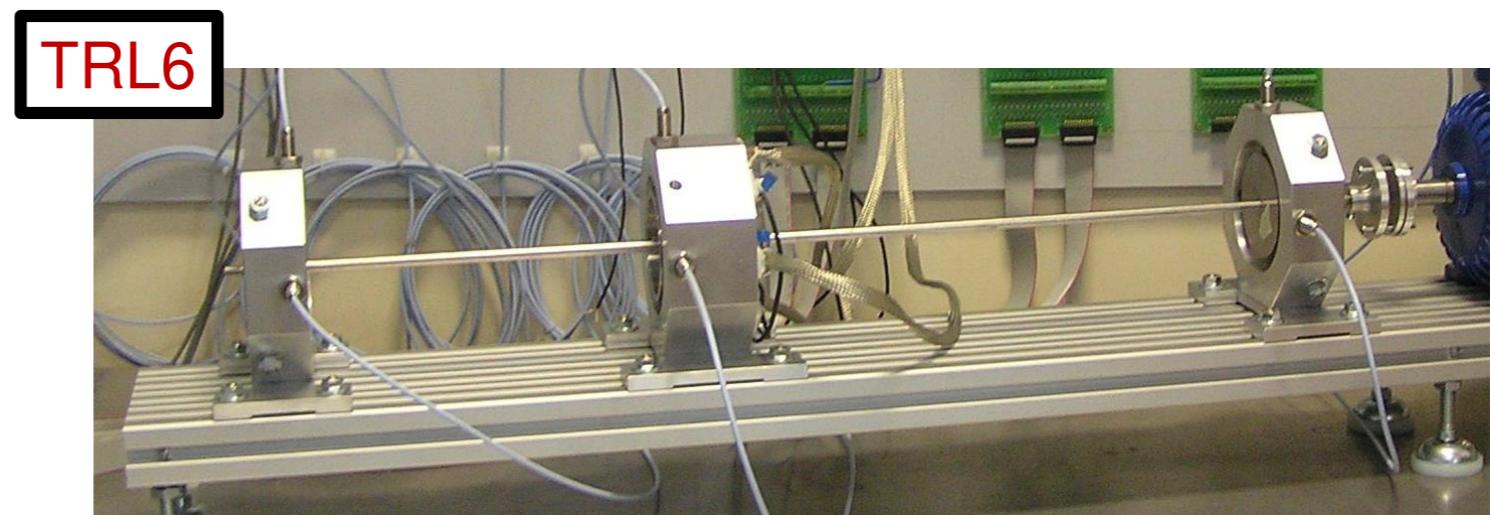
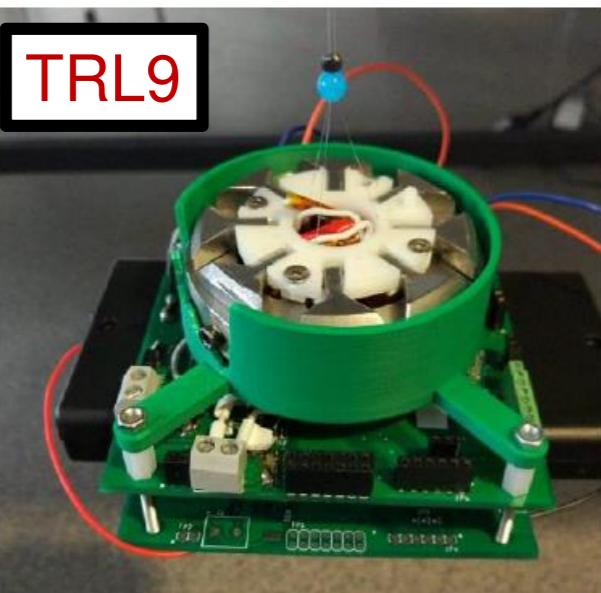
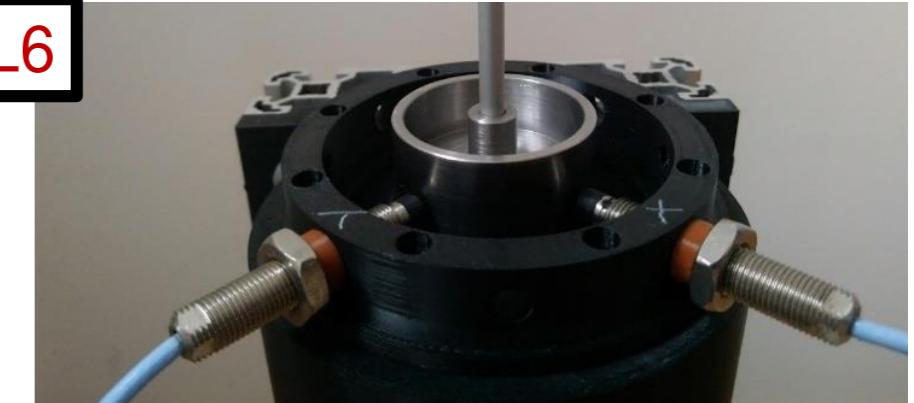
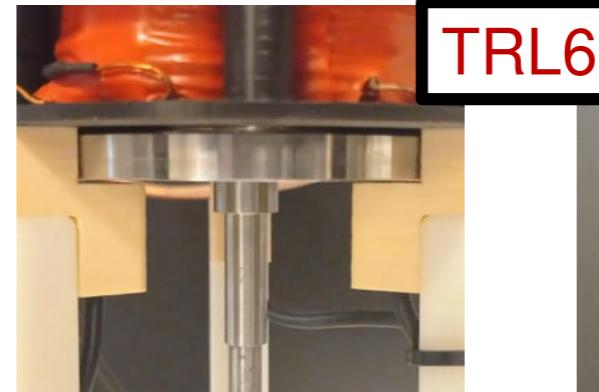
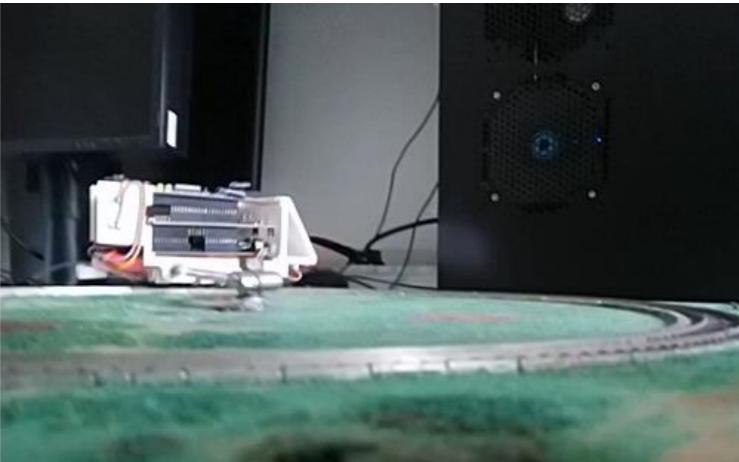
# Laboratory test-rigs



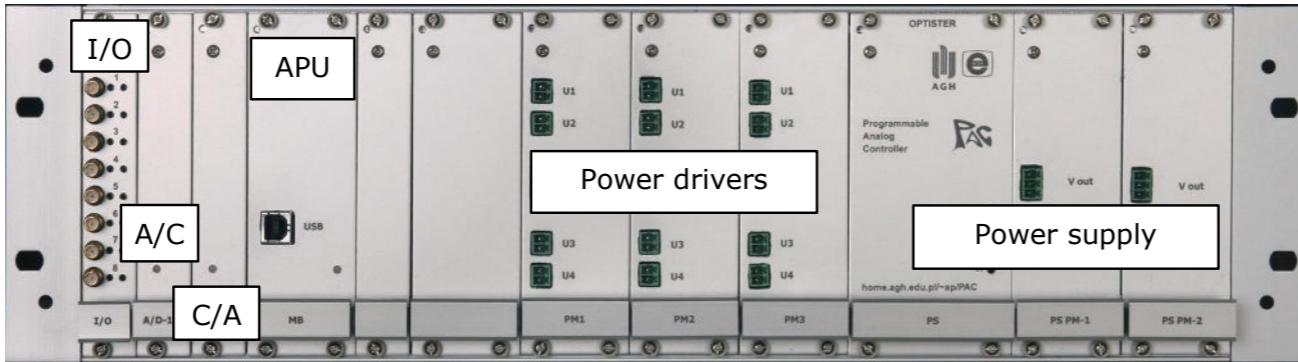
TRL9



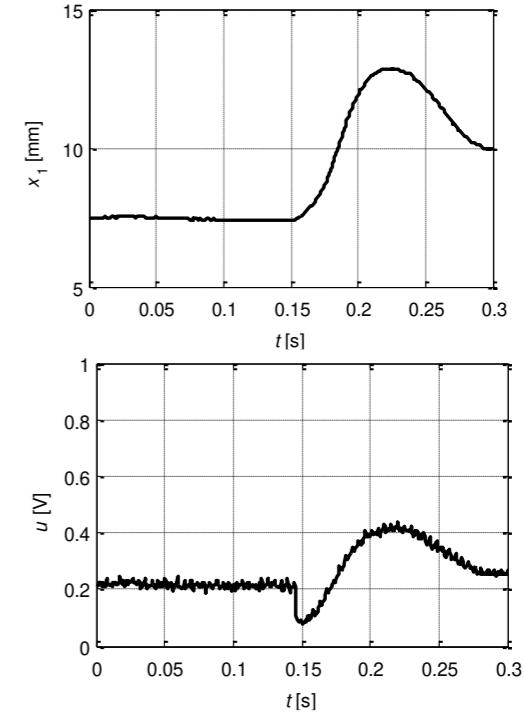
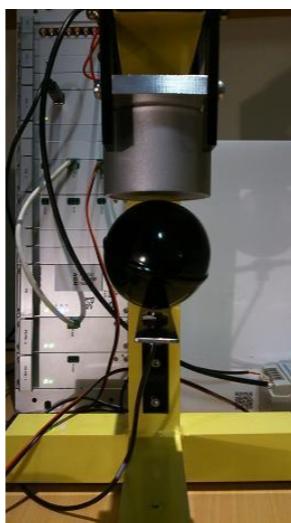
# Laboratory test-rigs



# Programmable Automation Controller (PAC)

**TRL9**

Modular architecture (I/O, A/C, D/A, computing module, power amplifiers, logic module, stepper motor module, power modules)  
Configurable by hardware and software  
Hard real-time regime  
Parallel signal processing  
Analog and digital signal processing  
USB, Ethernet communication  
Industry standard



Reconfiguration of controller parameters in w 1.34 microseconds

# Offer for cooperation

- Design of electromagnetic actuators, electromagnetic grippers
- Design of active and hybrid magnetic bearings for various applications
- Industrial controllers with data acquisition, diagnostics and controller adaptation
- Reconfigurable instrumentation for measurement and control tasks
- Conventional and Intelligent nonlinear control methods
- Algorithms for control and diagnostics of equipment, evaluation of control quality
- Interdisciplinary analysis of existing and newly designed equipment
- Fabrication of laboratory models and pre-production prototypes

# Contact



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