Machine perception, dealing with uncertain knowledge, knowledge graphs, ...

Machine learning

Autonomous Agents

Knowledge management

Automated reasoning

Human Machine Interaction

### Robotics

- Peter de With (EE, VCA)
- Egor Bondarou (EE, VCA)
- Gijs Dubbelman (EE, EPS)
- Jim Portegies (M&CS, CASA)

**Application domain**

- AI expertise
  - Autonomous learning
  - Automated reasoning
  - Human Machine Interaction

**Smart Systems**

- Mykola Pechenizkyi (M&CS, DM)
- Decebal Mocanu (M&CS, DM)
- Rui Castro (M&CS, Sto)
- Ines Lopez (ME, D&C)

**Decision support systems**

- Mykola Pechenizkyi (M&CS, DM)
- Joaquim Vanschoren (M&CS, DM)
- Decebal Mocanu (M&CS, DM)
- Marwan Hasso (M&CS, AI5)
- Dirk Fahlbrand (M&CS, AI5)
- Michel Hochstenbach (M&CS, SC)
- Nikhil Banal (M&CS, CO)
- Rui Castro (M&CS, Sto)

**Medical Diagnosis & intervention**

- Frans vd Vosse (BME, CBV)
- Josien Puiu (BME, BIA)
- Milko Veta (BME, BIA)
- Veronica Cheplygina (BME, BIA)
- Uzay Kaymak (IE&IS, IS)

**Application domain**

- This includes a.o.:
  - autonomy, human interaction, ...

**AI expertise**

- This includes a.o.: 
  - machine learning, decision making, ...

**Knowledge management**

- Knowledge representation, dealing with uncertain knowledge, knowledge graphs, ...

**Automated reasoning**

- Diagnostics, inference engines, theorem provers, classifiers, automated verification (of SW), problem solving, ...

**Human Machine Interaction**

- Human in the loop, expert support, ethics of AI, human vs machine decision making, algorithmic transparency, trust and control, AI user experience, ...

**Machine vision, hearing aids, visual perception system, ...

**Autonomous learning, recommender systems, human in the loop, business process modeling, ...

**High Tech Systems, IoT, smart lighting, smart grids, smart sensors, smart networks, smart manufacturing, ...

**Auonomous learning, human in the loop, business process modeling, ...

**Medical perception, sensing, perception, interpretation, natural language processing, image processing, speech, music, ...

**Sensing, perception, interpretation, natural language processing, image processing, speech, music, ...

**Human in the loop, expert support, ethics of AI, human vs machine decision making, algorithmic transparency, trust and control, AI user experience, ...