

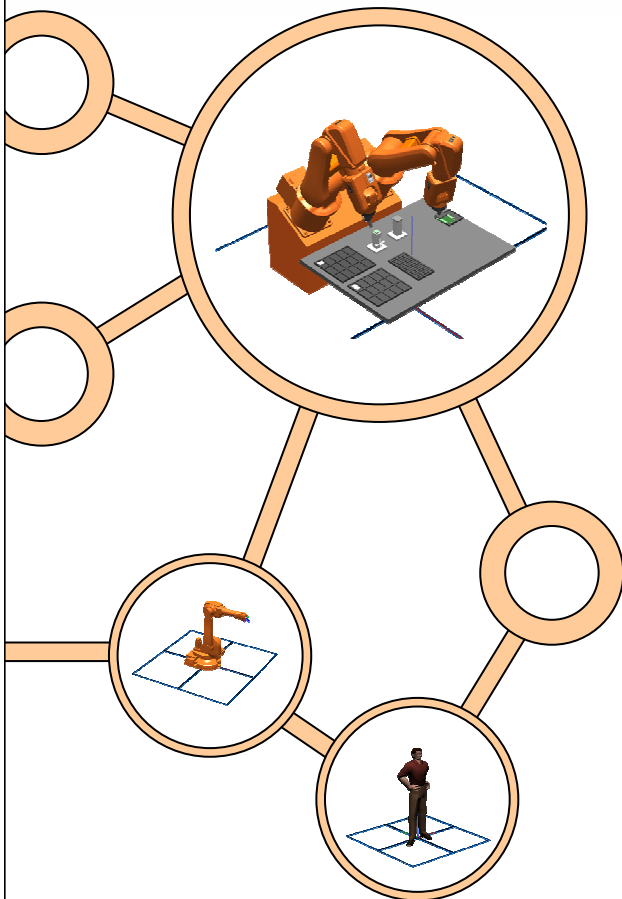


RObot control for Skilled ExecuTion of Tasks in natural interaction with humans; based on Autonomy, cumulative knowledge and learning

ROSETTA develops “human-centric” technology for industrial robots that will not only appear more human-like, but also cooperate with workers in ways that are safe and perceived as natural. Such robots will be programmed in an intuitive and efficient manner, making it easier to adapt them to new tasks when a production line is changed to manufacture a new product.

Areas of interest

- Intuitive ways of instructing the robot
 - *Task-level instruction*
 - *Knowledge and skill representation*
 - *System support (engineering tool)*
- Robot control
 - *Sensor integration*
 - *Assembly operations*
- Learning
 - *Skill-based architectures*
 - *Semantic acquisition and interpretation*
- Safety
 - *Physical human-robot interaction*
 - *Injury criteria*
 - *Workspace supervision*



Project consortium

ABB AB (Sweden, Coordinator)
ABB AG (Germany)
Dynamore GmbH (Germany)
Fraunhofer IPA (Germany)

K.U. Leuven (Belgium)
Ludwig-Maximilians-Universität Munich (Germany)
Lund University (Sweden)
Politecnico di Milano (Italy)