

## Optimization for Robots and robotic Systems; A Forty Years Story at IGMR

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In this presentation, we present the general development of robotics research from its start in the eighties of last century until today with special emphasis on optimization strategies both for robots and robotic systems. Starting from topological, kinematic and dynamic optimization of industrial robots and applications, the robotic research at IGMR concentrated on the optimization of parallel kinematic structures with certain emphasis on delta robots in the last ten years. Additionally mobile robotics including navigation, trajectory planning and task planning were investigated and will be presented and discussed in this presentation

### CV

Prof. Dr.-Ing. Dr. h. c. Burkhard Corves is Director of the Institute of Mechanism Theory, Machine Dynamics and Robotics of RWTH Aachen University, Aachen, Germany since 2000. He is Chairman of the VDI-Committee of the VDI-Scientific Board on “Mechanism and Machine Theory” and Chair of IFToMM MO Germany. His more than 550 publications cover different topics such as industrial and mobile robotics, linkages, cam mechanism, glass and packaging machinery, pneumatic mechanisms, computer-aided graphical analysis and synthesis in mechanism theory, mechatronic development and machine design strategy. <http://publications.rwth-aachen.de/search?ln=en&p=aid%3A%22P%3A%28DE-82%29IDM00228%22&jrec=1>

