

Einladung

**zum Vortrag am Montag, 15.05.2017, 17.00 Uhr
in Gebäude A5 1, Hörsaal -1.03**

Herr M. Sc. Goran Huskić

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zum Thema

Path Following Control of Skid-Steered Wheeled Mobile Robots at Higher Speeds on Different Terrain Types

A new nonlinear control law for path following with skid-steered mobile robots is proposed. A terrain-dependent kinematic model is utilized in path coordinates, and its parameters are experimentally evaluated. A kinematic path following control is developed using the Lyapunov theory.

A separate linear velocity control is then proposed, taking reachable curvatures and actuator saturation into account. The proposed approach is experimentally evaluated in different terrain scenarios, and compared with two other state-of-the-art algorithms. The skid-steered vehicles used for the experiments are the well known commercial mobile robots: Robotnik Summit XL, and Segway RMP440.

**Alle Interessenten sind herzlich eingeladen.
Prof. Dr.-Ing. habil. J. Rudolph**