Kolloquium Angewandte Mathematik
Prof. Thomas Apel (BAU1)
Prof. Matthias Gerdts (LRT1)
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Universität der Bundeswehr München

Vortragsankündigung

Am Montag**, den 26.06.2017,** hält **um 17:00 Uhr**

Karl Worthmann
(TU Ilmenau)

einen Gastvortrag über das Thema

Does model predictive control work without terminal constraints

Der Vortrag findet im **Raum 1401** in **Gebäude 33** statt.

Vortragszusammenfassung

Model predictive control is nowadays a widely used advanced control technique. Firstly, due to its capability to deal with control and state constraints and, secondly, due to the simplicity of the basic idea: Measure the current state, predict and optimize over a finite time horizon, and implement the first piece of the computed input function before the process is repeated ad infinitum. Clearly, this methodology requires a sufficiently large optimization window. But is this sufficient to conclude properties like asymptotic stability of the resulting closed loop? And, if this question can be answered in the affirmative, can we quantify "sufficiently large"? In this talk, we address these questions and explicate the answers by means of a nonholonomic robot example.

Alle Interessierten sind dazu herzlich eingeladen.