OTTO VON GUERICKE UNIVERSITÄT MAGDEBURG

CDS
RESEARCH CENTER DYNAMIC SYSTEMS
SYSTEMS ENGINEERING

seminar

“› **On the moment approach in control theory** (https://www.cds.ovgu.de/cds_media/Content_Dokumente/2017+AbsSky+Seminar.pdf) ”

Abstract:

We recall the main statements from classical moment problem and discuss their possible application to some problems of contro
In the first part we consider the time optimal control problem for finite dimensional systems and its relation with Markov moment
problem. The main part is devoted to non-Fourier moment problem in the analysis of exact controllability for infinite dimensional
systems. We explain the main ideas of the approach and the mathematical tools used. We also discuss the applications to sever
particular problems of controlling (non-homogeneous string, Timoshenko beam etc.).