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## Einladung zum Gastvortrag

im Rahmen des InnoLecture-Kolloquiums

Am Freitag, 25.06.2010, 9.30 Uhr, spricht  
in Gebäude C7 4 (Zentrum für Sprachforschung),  
Konferenzraum 1.17

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zum Thema

### Some results on parameter identification in linear distributed parameter systems

Parameter identification in linear distributed parameter systems is considered. The approach generalizes earlier results obtained for linear finite dimensional systems to both, linear delay systems, and systems described by spatially one-dimensional partial differential equations with boundary conditions. The proposed method is exemplarily introduced on the basis of a system with delayed input and zero initial conditions. Possible generalizations to delay systems with nonzero initial conditions are discussed. When rewriting boundary value problems as convolutional systems over rings of generalized functions, or rings of entire functions in the Laplace domain, the method can be generalized to this latter class of systems. For these models the main advantage of the proposed method lies in the fact that boundary measurements or at most lumped measurements are sufficient for the parameter estimation. As for delay systems, the method is introduced on the basis of simple examples, namely the wave equation and the heat equation.

Alle Interessenten sind herzlich eingeladen.

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