Universität Konstanz

**Fachbereich
Mathematik und Statistik**

Universitätsstraße 10
Telefon: (07531) 88-2572
Telefax: (07531) 88-4797
E-Mail: Andrea.Barjasic@uni-konstanz.de

Datum: 28. November 2017

Universität Konstanz · Fach 203 · 78457 Konstanz

Einladung

Im Rahmen des Schwerpunktskolloquiums „Analysis und Numerik" hält

Frau Professor Dr. Barbara Kaltenbacher
(Alpen Adria Universität Klagenfurt, Österreich

am **Montag , dem 4. Dezember 2017**, einen Vortrag zum Thema:

All-At-Once versus Reduced Iterative Methods for Time Dependent Inverse Problems

Der Vortrag findet um **17:00 Uhr** in Raum **F 424** statt.

Alle Interessenten sind herzlich eingeladen.

Andrea Barjasic
Beauftragte für das Kolloquium

Abstract:

A large number of inverse problems in applications ranging from engineering via economics to systems biology can be formulated as a state space system with a finite or infinite dimensional parameter that is supposed to be identified from additional continuous or discrete observations. The aim of this talk is to formulate inverse problems of this kind in a reduced and an all-at-once fashion and compare some iterative regularization methods in these two different settings as they have already been shown to exhibit crucial differences for stationary inverse problems. In particular, we will consider Landweber iteration and the iteratively regularized Gauss-Newton method, as well as the Landweber-Kaczmarz iteration, as the latter obviously lends itself to a subdivision of the problem to a union of time intervals.