# Max-Planck-Institut für Dynamik komplexer technischer Systeme

Max Planck Institute for Dynamics of Complex Technical Systems

## **Research Position**

### Research Group Computational Methods in Systems and Control Theory

#### Type of position

One Postdoctoral Research Associate in Numerical Analysis working with Dr. Martin Stoll within the Computational Methods in Systems and Control Theory group (CSC) headed by Prof. Peter Benner. This group is part of the Max Planck Institute for Dynamics of Complex Technical Systems in Magdeburg, Germany, an interdisciplinary institute at the interface of engineering and mathematics.

#### Duration

The post is available from September 2012 or afterwards and will initially be awarded for two years plus a possible extension for another year (2+1).

#### Job Description

We are seeking a postdoctoral research associate to design and develop numerical methods, in particular preconditioners, for problems coming from PDE-constrained optimization, statistical inverse problems and optimal experimental design. Our goal is the fast solution of large-scale optimization problems subject to a partial differential equation (PDE) or systems of PDEs with possibly additional algebraic or box constraints. The project has a strong focus on efficient techniques from numerical linear algebra but all candidates are encouraged to apply. Candidates should hold a Ph.D. in computational mathematics, numerical analysis, computational science and engineering or related fields. The project also has a strong focus on the implementation of algorithms in C++ and/or MATLAB.

#### Compensation

The salary will be on the level of TVöD E13/14 (see http://oeffentlicher-dienst. info/tvoed/bund/ for details), according to the rules of the Max Planck Society.

#### Application procedure

Please send an application consisting of a cover letter, curriculum vitae, list of publications and names of three referees who are willing to provide a letter of recommendation upon request to Janine Holzmann (holzmann@mpi-magdeburg.mpg.de) by **June 30, 2012**. Informal enquiries may be made to Martin Stoll (stollm@mpi-magdeburg.mpg.de).

Expiration date: July 1, 2012



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Computational Methods in Systems and Control Theory

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