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

Team Leader (PostDoc) for Uncertainty Quantification in Science and Engineering 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 (MPI MD), Germany, an interdisciplinary institute at the interface of engineering and mathematics.

Duration

The post is available immediately. Initial contract duration is three years, with the possibility of extending the contract for another three years. A tenure track option is negotiable.

Job Description

We are seeking a postdoctoral researcher experienced in uncertainty quantification (UQ)/computational stochastics. Priority is given to applicants with a research record in numerical methods for stochastic partial differential equations (PDEs) and/or using reduced-order models in UQ for systems described by PDEs. The candidate is expected to develop computational methods for UQ in applications arising in process engineering, systems biology, biotechnology, and other areas of science and engineering with a focus on the research fields at the MPI MD. Due to the focus of the MPI MD on a strong interdisciplinary interaction of experiments and mathematical modeling, a large variety of experimental and real-life data are available in order to test and verify new UQ approaches and computational techniques.

The candidate will be heading a team of 3–5 Ph.D. students and PostDocs. Initially, there is the possibility to fill one Ph.D. position in a field of the candidate's choice, with the possibility of further job openings in 2013.

Candidates should hold a Ph.D. in computational stochastics, numerical analysis, computational science and engineering, or related fields. Experience in computational software development is highly appreciated.

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 Peter Benner (benner@mpimagdeburg.mpg.de).

Expiration date: July 1, 2012

MAX-PLANCK-INSTITUT FÜR DYNAMIK KOMPLEXER TECHNISCHER SYSTEME MAGDEBURG

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Computational Methods in Systems and Control Theory

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