UNIVERSITÄT PASSAU
Fakultät für Informatik und Mathematik

EINLADUNG

Herr Prof. Dr. Fabian Wirth
lädt herzlich
zu folgendem Gastvortrag ein:

**Am Dienstag, den 7. 2. 2017
um 18.00 Uhr
im Hörsaal 13 (IM), Innstr. 33, 94032 Passau**

spricht Frau

Prof. Dr. Birgit Jacob
(Arbeitsgruppe Funktionalanalysis,
Bergische Universität Wuppertal)

über das Thema:

Hamiltonian systems on infinite-dimensional spaces

Siehe Abstract

Hamiltonian systems on infinite-dimensional spaces

The field of infinite-dimensional systems theory has become a well-established field within mathematics and systems theory. Here we shall focus on the PDE approach to infinite-dimensional linear systems theory.

Two examples of such dynamical sytems are temperature distribution of metal slabs or plates, and the vibration of aircraft wings. Considering control and the interconnection of two or more of such systems one is led to the class of so called port-Hamiltonian systems. The norm of such a system is given by the energy (Hamiltonian) of the system. This fact enables us to show the existence and stability of solutions. Further, it is possible to determine which boundary variables are suitable as inputs and outputs, and how the system can be stabilized via the boundary.