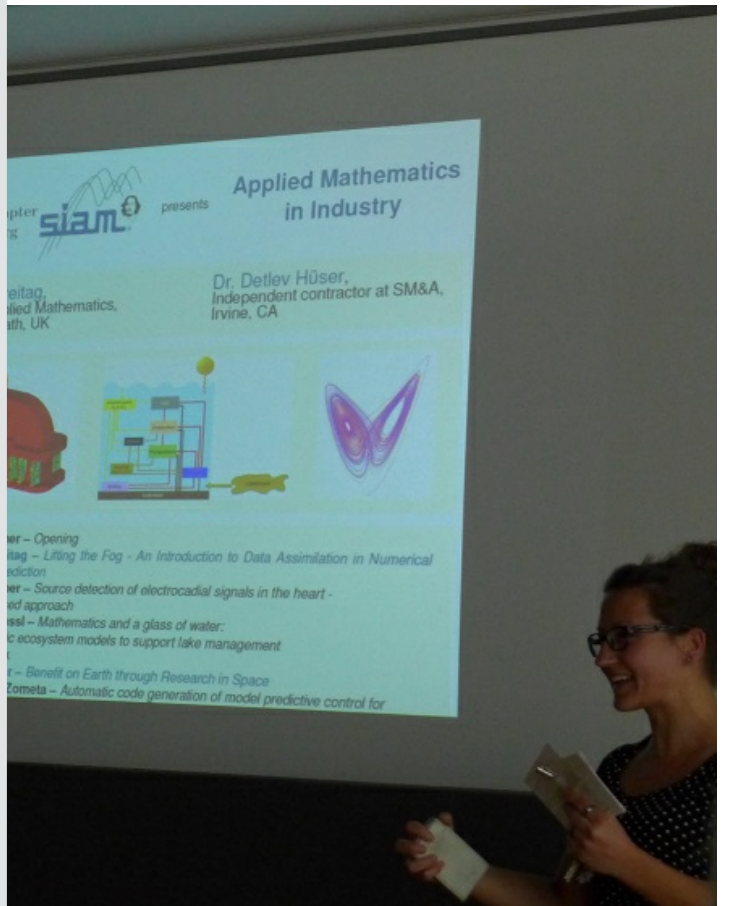


## STUDENT CHAPTER OF SIAM MAGDEBURG

"I Mathematics in Industry"





### Weather forecast for today



Figure: UK MetOffice

Fit of delay function  
Shortest distance in graph  
Compare results

Measurement

### Motivation, The heart chamber

- Cardiac tissue
- Rhythmic heart beat
- Cardiac excitation





**Mathematics and a glass of water:**  
Using aquatic ecosystem models to support lake management

Marieke Frassal et al.



dh creative services

Benefit on Earth through Research in Space  
Magdeburg, June 9th, 2015

Dr. Delfav Huisson

© 2015 dh creative services

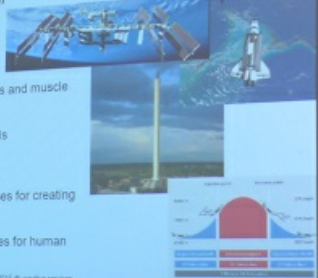
## Motivation for Research in Microgravity

Microgravity is a unique property of orbiting space vehicles being in a free fall condition

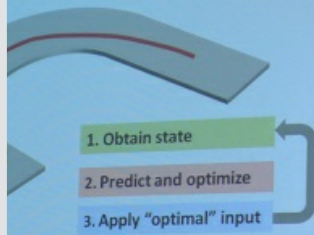
- No sedimentation
- No convection
- Body fluid distribution, Bone loss and muscle atrophy
- Activities of gravity sensitive cells

### Benefit on Earth

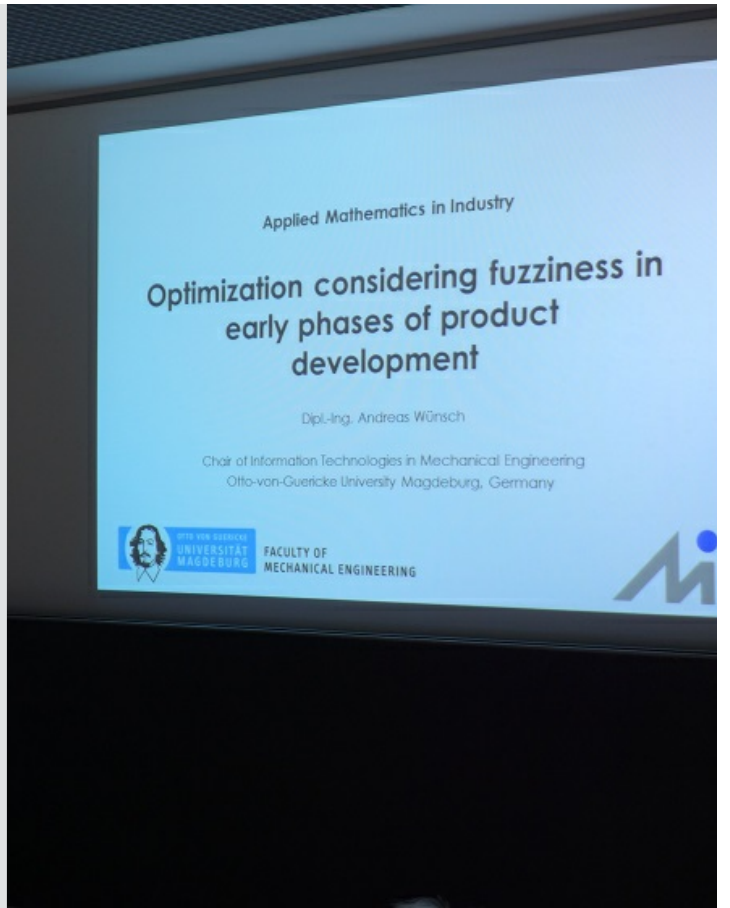
- Learn mechanisms and processes for creating new materials
- Development of countermeasures for human physiology and health care



## Control: basic principle

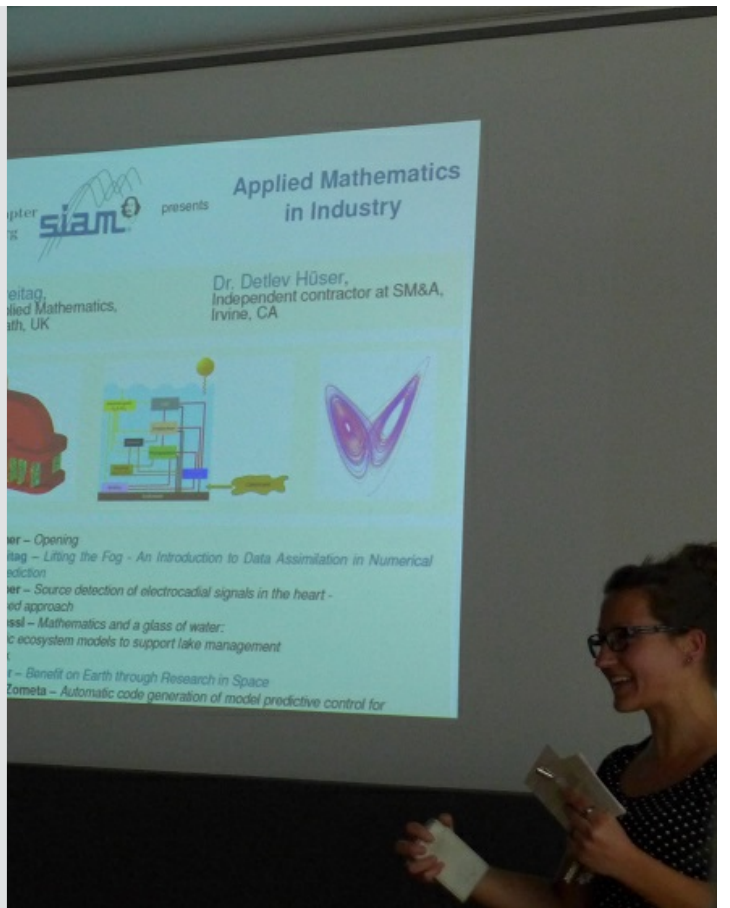


repeated prediction/optimization  
simple  
tionally expensive  
llenging





orwärts



vorwärts




vorwärts



Fit of delay function  
Shortest distance in graph  
Compare results

## Motivation, The heart chamber

- Cardiac tissue
- Rhythmic heart beat
- Cardiac excitation



Weber Institut für Mathematische Optimierung June 9, 20

orwärts



Mathematics and a glass of water:  
Using aquatic ecosystem models to support lake management

Marieke Fitzl et al.

HELMHOLTZ  
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ENVIRONMENTAL  
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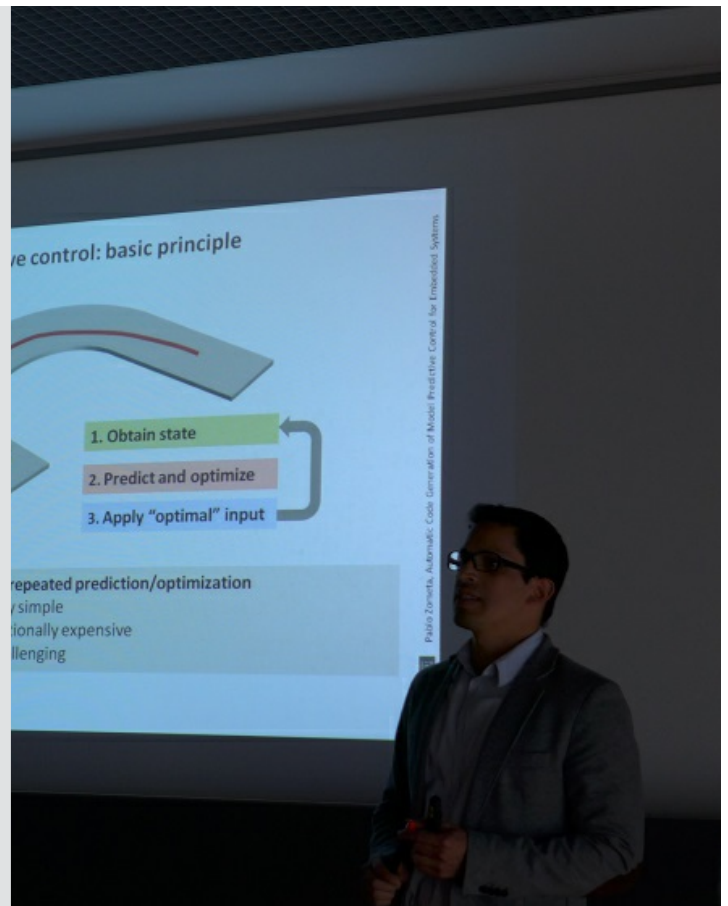
orwärts



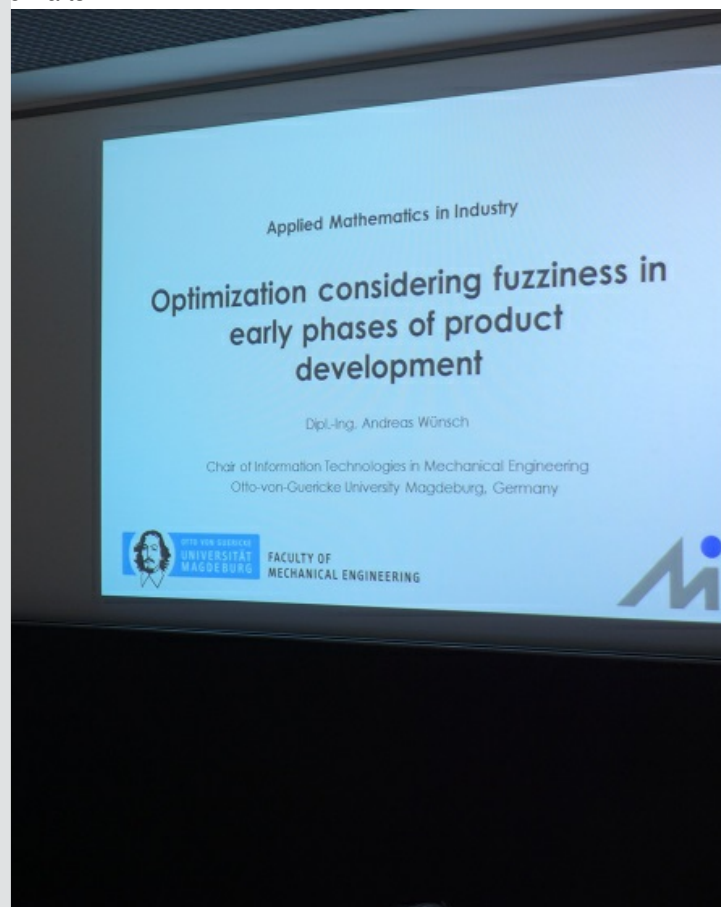
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summer workshop on **9th of June**. It focuses on the applications of  
nalyze real world applications. The workshop will start at **1 p.m.** at the

Prigogine V0.05.2+3

and two guest speakers:

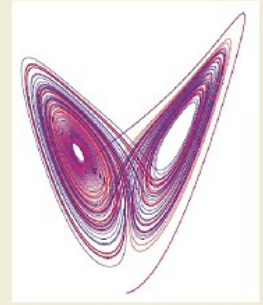
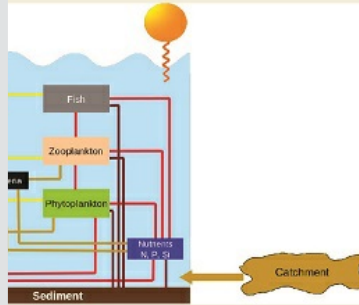
University of Bath, UK) and

CA, and Owner of dh creative services, Syke, Germany).

ments. The program including abstracts can be found below. If you  
"Orante Da Nino Dolce Vita" please let us now > [siamchapter@ovgu.de](mailto:siamchapter@ovgu.de)

presents **Applied Mathematics  
in Industry**

Dr. Detlev Hüser,  
Independent contractor at SM&A,  
Irvine, CA



- *An Introduction to Data Assimilation in Numerical  
of electrocardial signals in the heart -*

*d a glass of water:  
o support lake management*

*rough Research in Space  
ode generation of model predictive control for*

*considering fuzziness in early phases of product*

**09, 2015**

inar room Prigogine V0.05.2+3  
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FOR DYNAMICS OF COMPLEX  
TECHNICAL SYSTEMS  
MAGDEBURG



ation in Numerical Weather

heart - A graph based approach

ic ecosystem models to support lake

control for embedded systems

ses of product development

Aktuelles

15.02.2024

**Seminar Prof. Dr.-Ing. Daniel Juhre**

06.11.2023

**Nerd Nite 2023**

22.09.2023

**Naturkundemuseum**

> weitere...

Nerd Nite Magdeburg

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