

"Inverse problems and model identification in mechanics" organized by Barbara Kaltenbacher

Miniworkshop

Miniworkshop "Direct and inverse problems in piezoelectricity" organized by Barbara Kaltenbacher and Manfred Kaltenbacher,

October 6 - 7, 2005, Begin: 9:00, Room: HF 136

Lectures "Parameter Identification in Partial Differential Equations" held by Barbara Kaltenbacher

Download lecture notes (PDF)

1. Motivation, examples, applications
October 5, 2005, Time: 10:15 - 11:45, Room: HF 9901
2. The electrical impedance tomography problem I
October 10, 2005, Time: 13:45 - 15:15, Room: HF 9901
3. The electrical impedance tomography problem II
October 12, 2005, Time: 10:15 - 11:45, Room: HF 9901
4. The electrical impedance tomography problem III
October 17, 2005, Time: 10:15 - 11:45, Room: HF 9901
5. An inverse source problem for the heat equation I
October 19, 2005, Time: 10:15 - 11:45, Room: HF 9901
6. An inverse source problem for the heat equation II
October 24, 2005, Time: 10:15 - 11:45, Room: HF 9901
7. An inverse source problem for the heat equation III
November 14, 2005, Time: 10:15 - 11:45, Room: HF 9901
8. Determination of a coefficient in a hyperbolic PDE
November 16, 2005, Time: 10:15 - 11:45, Room: HF 9901
9. An inverse scattering problem I
November 21, 2005, Time: 10:15 - 11:45, Room: HF 9901
10. An inverse scattering problem II
November 23, 2005, Time: 10:15 - 11:45, Room: HF 9901
11. An inverse scattering problem III
November 28, 2005, Time: 10:15 - 11:45, Room: HF 9901
12. Numerical solution methods I: Tikhonov regularization
November 30, 2005, Time: 10:15 - 11:45, Room: HF 9901
13. Numerical solution methods II: Iterative methods
December 5, 2005, Time: 10:15 - 11:45, Room: HF 9901
14. Numerical solution methods III: the factorization method
December 7, 2005, Time: 10:15 - 11:45, Room: HF 9901

Tutorials "Parameter Identification in Partial Differential Equations" held by Tom Lahmer

Download: SobolevSpaceTheory.pdf

1. Tutorial 1
October 5, 2005, Time: 15:30 - 16:15, Room: HF 136
2. Tutorial 2
October 10, 2005, Time: 15:30 - 16:15, Room: KHG 1
3. Tutorial 3

- October 12, 2005, Time: 15:30 - 16:15, Room: HF 9901
4. Tutorial 4
October 17, 2005, Time: 15:30 - 16:15, Room: HF 136
 5. Tutorial 5
October 19, 2005, Time: 15:30 - 16:15, Room: HF 136
 6. Tutorial 6
October 24, 2005, Time: 15:30 - 16:15, Room: HF 136
Download: [heatEqExample1_2.pdf](#)
 7. Tutorial 7: Inverse Problems in Partial Differential Equations
October 28, 2005, Time: 12:00 - 13:00, Room: HF 9903
Download: [illPosedLinearOperatorEquations.pdf](#)
 8. Tutorial 8
November 14, 2005, Time: 15:30 - 16:15, Room: HF 136
 9. Tutorial 9
November 16, 2005, Time: 15:30 - 16:15, Room: HF 136
 10. Tutorial 10
November 21, 2005, Time: 15:30 - 16:15, Room: HF 9901
 11. Tutorial 11
November 23, 2005, Time: 15:30 - 16:15, Room: HF 9901
 12. Tutorial 12
November 28, 2005, Time: 15:30 - 16:15, Room: HF 136
 13. Tutorial 13
November 30, 2005, Time: 15:30 - 16:15, Room: HF 136
 14. Tutorial 14
December 5, 2005, Time: 15:30 - 16:15, Room: HF 136
 15. Tutorial 15
December 7, 2005, Time: 15:30 - 16:15, Room: HF 9901