

"Numerical simulation of coupled fields" organized by Manfred Kaltenbacher

Miniworkshop (Lecture Notes)

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

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

Lecture Series I: FLUID-STRUCTURE-ACOUSTICS

- Computational aeroacoustics
October 10, 2005, Time: 15:30 - 17:00, Room: HF 9901
- Fluid/solid interaction coupled to acoustics
October 13, 2005, Time: 15:30 - 17:00, Room: HF 9901
- Applications (sound generation by turbulent flow, human voice generation)
October 19, 2005, Time: 15:30 - 17:00, Room: HF 9901

Lecture Series II: PIEZOELECTRICS

- Piezoelectric equations
October 20, 2005, Time: 15:30 - 17:00, Room: HF 9901
- Nonlinearities
October 24, 2005, Time: 15:30 - 17:00, Room: HF 9901
- Applications (stack actuator, ultrasound cleaning, ultrasound therapy)
October 28, 2005, Time: 10:15 - 11:45, Room: HF 9901

Lecture Series III: MAGNETO-MECHANICS

- 3D magnetic field computation
November 15, 2005, Time: 10:15 - 11:45, Room: HF 9901
- Magnetic force, moving body problem
November 17, 2005, Time: 10:15 - 11:45, Room: HF 9901
- Applications (magnetic valve, electric transformer, electromagnetic acoustic transducer)
November 22, 2005, Time: 10:15 - 11:45, Room: HF 9901

Lecture Series IV: MHD and POROUS MEDIA FLOWS held by Marco Discacciati

- Magneto-hydrodynamic problems
November 30, 2005, Time: 13:45 - 15:15, Room: HF 9901
- Magneto-hydrodynamic problems
December 01, 2005, Time: 10:15 - 11:45, Room: HF 9901
- Filtration of fluids through porous media
December 07, 2005, Time: 13:45 - 15:15, Room: HF 9901

Download the reference list (PDF)