

Summer School 2010 structure

1. Course: **Soundscape**

- Monday, September 13, 2010, full day course
- organized by Brigitte Schulte Fortkamp and Luigi Maffei
- sponsored by COST TD0804
- lectures:

Lectures:

- 9:00 - 10:00 *Brigitte Schulte-Fortkamp*
Introduction to the course. How soundscape came into Community Noise
- 10:00 - 11:30 *Ronny Klaboe*
Noise annoyance evaluation
- 11:30 - 13:00 *Volker Irmer*
Noise control techniques
- 14:30 - 16:00 *Dick Botteldooren*
Engineering Methodologies for the Soundscape approach
- 16:00 - 17:30 *Jian Kang*
Soundscape approach for architecture and urban planning
- 17:30 - 19:00 *Luigi Maffei*
Round Table - Summary - Discussion

2. Course: **Voice/Musical Acoustics**

- Monday, September 13, 2010, full day course
- organized by Malte Kob and Wilfried Kausel
- sponsored by COST 2103

Lectures:

- 9:00 - 10:30 *Wilfried Kausel and Malte Kob*
Physics and Models of Musical Instruments and the Human Voice
- 10:30 - 12:00 *Malte Kob and Wilfried Kausel*
Acoustic Measurement Methods for Musical Instruments
- 13:30 - 15:00 *Nathalie Henrich and Malte Kob*
Voice Analysis Methods
- 15:00 - 16:30 *Ingrid Bendl and Wilfried Kausel*
Inverse Filtering and Impedance Measurement Workshop
- 16:45 - 18:15 *Nathalie Henrich*
Singing Voice Assessment Workshop: Electroglottography and Impedance Measurement Techniques
- 18:15 - 19:45 *Malte Kob*
Acoustic Voice Quality Assessment Workshop

3. Course: **Building Acoustics**

- Tuesday, September 14, 2010, full day course
- organized by Michael Vorländer
- sponsored by COST TU0901

- 9:00 - 10:30 *Eddy Gerretsen*
Prediction models in building acoustics
- 11:00 - 12:30 *Michael Vorländer*
Auralization of Sound Insulation
- 14:00 - 15:30 *Sabine Schlittmeier*
Psychoacoustic methodologies in laboratory experiments (attention, privacy, performance)
- 16:00 - 17:30 *Kerstin Persson Waye*
Psychoacoustic and social methodologies in the field (social surveys, annoyance of neighbour noise)
- 17:30 - 19:00 *Birgit Rasmussen*
Round Table

4. Course: **Hydroacoustics**

- Tuesday, September 14, 2010, half day course
- organized by Eugeniusz Kozaczka

- 14:00 - 15:00 *Grazyna Grelowska*
Investigation of seabed by means of acoustic methods
- 15:00 - 16:00 *Tim Leighton*
Long distance acoustic propagation in the ocean: Sound speed profile, SOFAR channel, ray bending in the ocean, absorption, propagation to distance, Heard Island experiment
- 16:30 - 17:30 *Tim Leighton*
Exploitation of ambient noise: Acoustic daylight, use of acoustics to sense air/sea mass transfer, sensing of rainfall
- 17:30 - 18:30 *Tim Leighton*
Bubble acoustics and cavitation

5. Course: **Numerical acoustics**

- Wednesday, September 15, 2010, half day course
- organized by Andrew Peplow and Martin Ochmann

- 9:00 - 10:00 *Andrew Peplow*
Acoustical Finite Elements: General Theory
- 10:00 - 11:00 *Andrew Peplow*
Advanced methods and applications of new methods in Finite Elements
- 11:30 - 12:30 *Martin Ochmann*
Acoustical Boundary Elements: General Theory
- 12:30 - 13:30 *Haike Brick*
Acoustical Boundary Elements: Special subjects, applications, and examples with BEMLAB

6. Course: **Psychoacoustics**

- Wednesday, September 15, 2010, half day course
- organized by Armin Kohlrausch

- 9:00 - 11:00 *Armin Kohlrausch*
New developments and results in psychoacoustic modelling
- 11:30 - 13:30 *Hugo Fastl*
Audio-visual interactions in loudness perception and localization

7. Course: **Ultrasound**

- Wednesday, September 15, 2010, half day course
- organized by Adriano Alippi and Enrique Riera

- 9:00 - 10:00 *Adriano Alippi*
Ultrasound propagation in free space and guided structures
- 10:00 - 11:00 *Enrique Riera*
Power ultrasound
- 11:30 - 12:30 *Adriano Alippi*
Nonlinear effects in ultrasound sources and propagation
- 12:30 - 13:30 *Enrique Riera*
Industrial and medical applications