Friday 06/09 13-14h: registration

Approaching acoustics

Hot Topics 1-4
**Friday 06/09**

- 13:00-14:00 Registration in L
- 14:00-14:15 Opening of summer school in L
- 14:15-14:45 What is acoustics? Monika Rychtarikova - KULeuven -
  - coffee break in L
- 15:00-16:30 Hearing Armin Kohlraush - TU Eindhoven -
  - coffee break in L
- 17:00-18:30 Measurements / Simulations Wim Desmet - KULeuven -
- 20:00-22:00 Football playing / match

**Saturday 07/09**

- 08:30-10:00 Acoustic materials Elke Deckers - KULeuven -
  - coffee break in L
- 10:30-12:00 Musical acoustics Murray Campbell - Edinburgh University -
- 12:00-13:30 Lunch Break in L
- 13:30-14:00 Group photo in front of L building
- 14:00-15:30 Room acoustics Martijn Vercammen - Peutz Consultants, Belgium -
  - coffee break in L
- 16:00-17:30 Building acoustics Jens Holger-Rindel - Odeon, Denmark -

**Sunday 08/09**

- 08:30-10:00 Ultrasonic characterisation of porous materials Philippe Leclaire - ISAT - Univ. Bourgogne -
  - coffee break in L
- 10:30-12:00 Final exam
- 12:00-12:30 Lunch package pick-up in L
- 12:30-13:00 Closing of summer school (handing out certificates)
- 13:00 Departure of the bus to Aachen
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>13:00-14:00</td>
<td>Registration in L</td>
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<td>14:00-14:15</td>
<td>Opening of summer school in L</td>
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<td>14:15-15:30</td>
<td>Auditory models and their potential application in hearing technology</td>
<td>Torsten Dau - DTU, Lyngby -</td>
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<td>Coffee break in L</td>
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<td>16:00-17:30</td>
<td>Student self-introduction (5 min. each)</td>
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<td>20:00-22:00</td>
<td>Football playing / match</td>
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<td>08:30-10:00</td>
<td>Binaural modeling</td>
<td>Mathias Dietz - U Oldenburg -</td>
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<td>Coffee break in L</td>
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<td>10:30-12:00</td>
<td>Question authority: Predicting perceptual pitch phenomena with a new model based on peripheral and central physiology</td>
<td>Laurel Carney - U Rochester -</td>
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<td>14:00-15:30</td>
<td>Machine learning applications to auditory modeling</td>
<td>Shihab Shamma - LSP Paris -</td>
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<td>16:00-17:30</td>
<td>Hearing loss applications of advanced auditory models</td>
<td>Sarah Verhulst - U Gent -</td>
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<td>08:30-10:00</td>
<td>Advances and challenges in modeling cochlear implant stimulation</td>
<td>Ian Bruce - McMaster U-</td>
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/ Hot Topic 2: Smart City Sound /

**Friday 06/09**
- 13:00-14:00 Registration in L
- 14:00-14:15 Opening of summer school in L
- 14:15-15:30 Introduction to Smart city sound
  - Dick Botteldooren
  - U Gent
- coffee break in L
- 16:00-17:30 Student self-introduction (5 min. each)
- 20:00-22:00 Football playing / match

**Saturday 07/09**
- 08:30-10:00 Co-creation of urban soundscapes (including methods for getting people’s opinion)
  - Francesco Aletta
  - UCL
  - coffee break in L
- 10:30-12:00 Smart mobility and traffic (how to smartly organise road, rail, ...)
  - Arnaud Can
  - IFSTTAR
- 12:00-13:30 Lunch Break in L
- 13:30-14:00 Group photo in front of L building
- 14:00-15:30 Urban sound propagation control (street acoustics, canyon-to-canyon propagation, greening)
  - Timothy Van Renterghem
  - UGent
  - coffee break in L
- 16:00-17:30 Smart sound monitoring (including new technologies for measuring)
  - Dick Botteldooren
  - UGent

**Sunday 08/09**
- 08:30-10:00 Urban psycho-acoustics
  - André Fiebig
  - TU Berlin
  - coffee break in L
- 10:30-12:00 final exam
- 12:00-12:30 Lunch package pick-up in L
- 12:30-13:00 Closing of summer school (handing out certificates)
- 13:00 Departure of the bus to Aachen
### Friday 06/09

- **13:00-14:00** Registration in L
- **14:00-14:15** Opening of summer school in L
- **14:00-15:30** Student self-introduction (5 min. each)
- **16:00-17:30** Introduction to Brillouin zone and Plane Wave Expansion by Alejandro Cebrecos - i3M, CSIC -
- **20:00-22:00** Football playing / match

### Saturday 07/09

- **08:30-10:00** Introduction to Multiple Scattering Theory by Jean-Philippe Groby - LAUM, UMR CNRS 6613 -
- **10:30-12:00** Sonic crystals by Alejandro Cebrecos - i3M, CSIC -
- **12:00-13:00** Lunch Break in L
- **13:30-14:00** Group photo in front of L building
- **14:00-15:30** Introduction to acoustic metamaterials by Jean-Philippe Groby - LAUM, UMR CNRS 6613 -
- **16:00-17:30** Homogenization theory by Agnes Maurel - Institut Langevin, UMR CNRS 7587-

### Sunday 08/09

- **08:30-10:00** Numerical simulation and application of metamaterials in vibroacoustics by Lucas Van Belle - KULeuven -
- **10:30-12:00** Final exam
- **12:00-12:30** Lunch package pick-up in L
- **12:30-13:00** Closing of summer school (handing out certificates)
- **13:00** Departure of the bus to Aachen
Friday 06/09

13:00-14:00 Registration in L
14:00-14:15 Opening of summer school in L
14:15-15:30 Beam forming, principles of acoustic camera
coffee break in L
16:00-17:30 Laser doppler vibrometry applications in acoustics
Bert Roozen
- KULeuven -
20:00-22:00 Football playing / match

Saturday 07/09

08:30-10:00 Recent advances in ultrasound echography
Jan D’Hooge
- UZ Leuven -
coffee break in L
10:30-12:00 Student self-introduction (5 min. each)
12:00-13:30 Lunch Break in L
13:00-14:00 Group photo in front of L building
14:00-15:30 Spatially resolved acoustic spectroscopy for imaging material microstructure
Matt Clark
- U of Nottingham -
coffee break in L
16:00-17:30 Picosecond ultrasonics for tomography of biological cells
Matt Clark
- U of Nottingham -

Sunday 08/09

08:30-10:00 Photoacoustic imaging for non-destructive testing
Christ Glorieux
- KULeuven -
coffee break in L
10:30-12:00 Final exam
12:00-12:30 Lunch package pick-up in L
12:30-13:00 Closing of the summer school (handing out certificates)
13:00 Departure of the bus to Aachen