Programme summary

Monday 2nd April

09:00 - 09:25  Brian C.J. Moore  “What is temporal fine structure good for?”
Department of Experimental Psychology, University of Cambridge, Cambridge, UK.

09:25 – 09:50  Chris Plack  “Effects of inner and outer hair cell dysfunction on cochlear gain and compression”
Human Communication & Deafness Division, School of Psychological Sciences, The University of Manchester, Manchester, UK.

09:50 - 10:15  Kelly Tremblay  “Hearing aids and brain: what’s the connection?”
Department of Speech and Hearing Sciences, University of Washington, Seattle, USA.

10:15 – 10:45  -- Break --

10:45 - 11:00  Christian Füllgrade  “Age-related changes in auditory perception”
MRC - Institute of Hearing Research, Nottingham, UK.

11:00 – 11:35  Joost M. Festen  “Auditory and cognitive processing in speech recognition”
Department of ENT/Audiology, VU University Medical Center, Amsterdam, The Netherlands.

11:35 - 12:00  Deniz Baskent  “Two ways hearing impairment can interact with cognitive processing”
Department of Otorhinolaryngology/Head and Neck Surgery, University Medical Center Groningen, Groningen, The Netherlands; School of Behavioral and Cognitive Neuroscience, University of Groningen, Groningen, The Netherlands.

Tuesday 3rd of April

09:00 - 09:25  Dreschler W
09:25 – 09:50  Kollmeier B
10:00 - 10:15  -- Break --
10:15 – 10:45  Kalluri S
10:45 – 11:00  Stone M
11:00 – 11:25  Edwards B

Wednesday 4th of April

09:00 - 09:25  Abdala C
09:25 – 09:50  Werner L
10:00 - 10:15  -- Break --
10:15 – 10:45  Horn D
10:45 – 11:00  Deltenre P
11:00 – 11:25  Nittouer S

talks: 15min
questions: 10min

Programme details

Monday 2nd April

Session I: Auditory deficits
Chaired by: Trevor Agus

09:00 - 09:25  Brian C.J. Moore  “What is temporal fine structure good for?”
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Session II: Modelling and Physiology
Chaired by: Marcel Stimberg and Marc Rebillat

13:30 - 13:55  Mike Heinz  “Physiological correlates of perceptual TFS deficits with sensorineural hearing loss”  
Department of Speech, Language, and Hearing Sciences, Purdue University, West Lafayette, USA; Weldon School of Biomedical Engineering, Purdue University, West Lafayette, USA.

13:55 - 14:20  Ian C. Bruce  “Modeling changes in auditory nerve fiber excitability for acoustic and electric stimulation”  
Department of Electrical and Computer Engineering, McMaster University, Hamilton, Canada.

14:20 - 14:45  Ray Meddis  “Modelling the efferent contribution to hearing speech in noise”  
Department of Psychology, University of Essex, Colchester, UK.

14:45 – 15:15  -- Break -- 

15:15 - 15:40  Jay T. Rubinstein  “Biophysical simulation of responses to electrical stimulation”  
Virginia Merrill Bloedel Hearing Research Center, Department of Otolaryngology-Head and Neck Surgery, University of Washington, Seattle, USA.

15:40 - 16:05  Christophe Micheyl  “Revisiting the place-vs-time debate, from the ground up”  
Department of Psychology, University of Minnesota, Minneapolis, USA.

16:05 - 16:30  Shihab Shamma  “Role of coherence and rapid-plasticity in active perception of complex auditory scenes”  
Neural Systems Laboratory, Department of Bioengineering, University of Maryland, Washington, USA.

16:30 – 17:00  -- Break -- 

17:00 - 17:25  Sebastien Santurette  “How essential are place and temporal fine-structure cues for high-frequency complex pitch?”  
Department of Electrical Engineering, Technical University of Denmark, Lyngby, Denmark.

17:25 - 17:50  Chris Sumner  “Is mode-locking the new phase-locking? Complex temporal encoding of periodicity in cochlear nucleus”  
MRC Institute of Hearing Research, Nottingham, UK.

17:50 – 18:05  -- Short break -- 

18:05 - 18:30  Enrique A. Lopez Poveda  “Quantifying inner and outer hair cell loss in listeners with mild-to-moderate cochlear hearing loss”  
Unidad de Audición Computacional y Psicoacústica, Instituto de Neurociencias de Castilla y León, Universidad de Salamanca, Salamanca, Spain.

18:30 - 18:55  Hedwig Gockel  “Does the Frequency Following Response (FFR) reflect pitch?”  
MRC Cognition and Brain Sciences Unit, Cambridge, UK.

Tuesday 3rd April

Session III: Hearing Aids
Chaired by: Tim Ives

09:00 - 09:25  Wouter Dreshler  “Perceptual effects of noise reduction in hearing aids”  
Academic Medical Center, KNO-Audiology, Amsterdam, The Netherlands.

09:25 - 09:50  Birger Kollmeier  “Models for speech intelligibility in rooms and their consequences for hearing aid processing”  
Medical Physics Section, Carl von Ossietzky-Universität Oldenburg, Oldenburg, Germany.
09:50 - 10:15 Olaf Strelcyk “Bio-inspired hearing-aid design”
Starkey Hearing Research Center, Berkeley, USA.
10:15 – 10:45 -- Break --
10:45 - 11:10 Sridhar Kalluri “Toward a laboratory measure of hearing-aid Outcome in real-world multi-talker environments”
Starkey Hearing Research Center, Berkeley, USA.
11:10 - 11:35 Mike Stone “‘Listening in the dips’: the dynamic depth and range achievable by the hearing impaired”
Department of Experimental Psychology, University of Cambridge, Cambridge, UK.
11:35 - 12:00 Brent Edwards “How hearing aid technology can affect cognitive function”
Starkey Hearing Research Center, Berkeley, USA.

Session IV: Implants
Chaired by: Jonathan Laudanski

13:30 - 13:55 Collette McKay “Temporal processing in CI, ABI and AMI users”
Audiology and Deafness Research Group, School of Psychological Sciences, University of Manchester, Manchester, UK.
13:55 - 14:20 Robert V. Shannon “New Results with Auditory Brainstem Implants”
House Ear Institute, Los Angeles, USA.
14:20 - 14:45 Jan Wouters “Enhanced temporal coding can lead to improved sound perception in cochlear implants”
ExpORL, Department of Neurosciences, Katholieke Universiteit Leuven, Leuven, Belgium.
14:45 – 15:15 -- Break --
15:15 - 15:40 Ward Drennan "Perception of frequency-modulation patterns based on recovered-envelope cues for cochlear implant listeners"
V. M. Bloedel Hearing Research Center, Department of Otolaryngology, University of Washington, Seattle, USA.
15:40 - 16:05 Norbert Dillier “Neurophysiologically-based coding strategy for cochlear implants”
Laboratory of Experimental Audiology, ENT Department, University Hospital, Zurich, Switzerland.
16:05 – 16:30 Bernhard Seeber “Trading of temporal fine structure and envelope cues leads to robust localization in reverb”
MRC Institute of Hearing Research, Nottingham, UK.
16:30 – 17:00 -- Break --
17:00 - 17:25 Patrick Boyle “AGC performance revealed by the STAR² roving level speech test and the impact of speech rate”
Advanced Bionics, Cambridge, UK.
17:25 - 17:50 Kaibao Nie “Encoding harmonics to improve speech, music and mandarin tone perception with cochlear implants”
Department of Otolaryngology-Head & Neck Surgery, Department of Electrical Engineering, University of Washington, Seattle, USA.
17:50 - 18:15 David McAlpine “Making bilateral binaural”
Ear Institute, University of London, London, UK.
Wednesday 4\textsuperscript{th} April

Session V: Development
Chair by: Laurianne Cabrera

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
<th>Institution</th>
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</thead>
<tbody>
<tr>
<td>09:00 - 09:25</td>
<td>Carolina Abdala</td>
<td>“Maturation of human cochlear function”</td>
<td>House Ear Institute, Los Angeles, USA.</td>
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<tr>
<td>09:25 - 09:50</td>
<td>Lynne Werner</td>
<td>“Temporal aspects of infants’ attention to sound”</td>
<td>Dept. of Speech &amp; Hearing Sciences, University of Washington, Seattle, USA.</td>
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<tr>
<td>09:50 - 10:15</td>
<td>Quentin Summerfield</td>
<td>“Spatio-temporal brain activity during multi-talker listening in younger and older adults”</td>
<td>Department of Psychology, The University of York, York, UK.</td>
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<td>10:15 – 10:45</td>
<td>-- Break --</td>
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<tr>
<td>10:45 - 11:10</td>
<td>David Horn</td>
<td>“Spectral ripple inversion detection in infants”</td>
<td>Seattle Children’s, Seattle, USA.</td>
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<tr>
<td>11:10 - 11:35</td>
<td>Paul Deltenre</td>
<td>“The Frequency-Following Response: an ancient tool re-sharpened to the benefit of new ideas”</td>
<td>Faculty of Medicine, Université Libre de Bruxelles, Bruxelles, Belgium.</td>
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<tr>
<td>11:50 - 12:15</td>
<td>Susan Nittrouer</td>
<td>“Developmental changes in perceptual attention and organization for speech: implications for cochlear implant design”</td>
<td>Otolaryngology - Head and Neck Surgery</td>
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We wish to thank Advanced Bionics, Neurelec and Starkey for their financial support.

We also wish to thank the Société Française d’Audiologie.