



香港聲學學會

Hong Kong Institute of Acoustics

Attentive Filtering in the Brain and the Electronic “Batears”

Speakers: Professor Jufang HE

Dept of Rehabilitation Sciences, HK Polytechnic University

Venue: Room DE303, HK Polytechnic University

Time: 6:30-7:30 pm, Tue, 14 Oct 2008 (Reception starts at 6:15pm)

Our hearing has the ability to tune our attention to a certain sound/voice while filtering out the unwanted noise. There are several cues which animals and humans use in this tuning process: the spectrum, the direction, the context of the sound/voice, and the visual information related to the sound/voice. The auditory cortex must be involved in judging the signal from noise and integrating the visual information. On the other hand, it is desirable to place the filter at the auditory pathway as earlier as possible from the point view of information theory. The massive corticofugal projections would answer the above requirements. The major part of corticofugal system in the auditory system is the corticothalamic projections involving the thalamic reticular nucleus.

In the seminar, we are going 1) to review the auditory system: its anatomy and physiology, 2) to zoom up the anatomical structure of the corticofugal system, and 3) finally to focus on our recent studies about the corticofugal modulation using extracellular recording, intracellular recording, and histochemical techniques.

The second part of the seminar would focus on the recent development of our ongoing project: electronic “batears”. We shall try to extend topic it into the learning mechanism in the normal and vision-impaired subjects with the electronic “batears”

The Seminar is free of charge to members of HKIOA. Non-members will be charged at HK\$100 per head to cover administrative costs. For registration, please send a blank e-mail to: reg15@wal.hk. You may type HKIOA Membership No. at the title of the blank e-mail for our easy administration. Enquiries please send to the undersigned at: who@wal.hk.

Wilson Ho, Chairman of Activities Sub-committee, HKIOA

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